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ABSTRACT

The titles of papers in this document on impromptu or spontaneous speech are as follows: "Impromptu Speech, Structure, and Process"; "Non-Verbal Aspects of Impromptu Speech"; "Echanges, interventions et actes de langage dans la structure de la conversation" ("Exchanges, Interventions, and Speech Acts in the Structure of Conversation"); "Phatic, Metalingual and Metacommunicative Functions in Discourse: Gambits and Repairs"; "The Segmentation Problem in the Study of Impromptu Speech"; "The Segmentation of Impromptu Speech"; "The Symbiotic Relationship between Pragmatic Particles and Impromptu Speech"; "The Emergence of Speech Organisers in a Renovated Language: The Case of Hebrew Void Pragmatic Connectives"; "Contrastive Analysis and Impromptu Speech"; "Observations Related to Impromptu Elements in Classroom Discourse and to the Function of Such Elements for Foreign Language Teaching and Learning"; "Why Impromptu Speech Is Easy to Understand"; "Impromptu Speech and Oral Translation"; "Effects of Some Characteristics of Impromptu Speech on Conference Interpreting"; "When Is It My Turn to Speak?"; "Impromptuness and Intonation"; "Exophora in English Conversation"; "From Function to Structure: Some Pragmatic Determinants of Syntactic Frequencies in Impromptu Speech"; "Feedback"; "The Study of Russian Impromptu Speech in Soviet Linguistics"; and "Reports on Projects Relevant to the Study of Impromptu Speech." (MSE)

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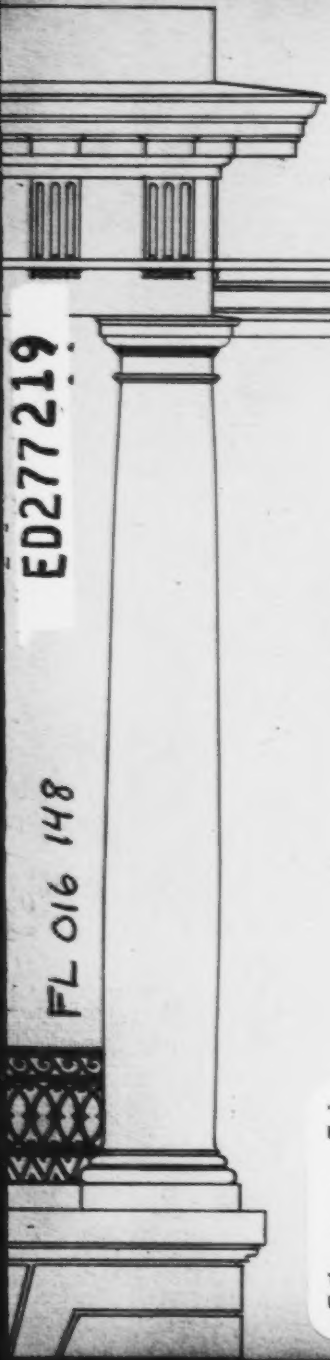

MEDDELANDEN FRÅN
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Impromptu Speech: A Symposium

NILS ERIK ENKVIST

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MEDDELANDEN FRÅN STIFTELSENS FÖR ÅBO AKADEMI
FORSKNINGSINSTITUT

Impromptu Speech: A Symposium

Papers
edited by

NILS ERIK ENKVIST

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EDITOR'S PREFACE

The private Åbo Akademi Foundation established its Research Institute in 1972, the aim being to support research at the Swedish-language university of Finland, Åbo Akademi. Within two years the Institute was operational, with one of its priorities defined as the sponsoring and arrangement of scholarly conferences. The Symposium on Problems in the Linguistic Study of Impromptu Speech, held in Åbo (Finnish: Turku) from November 20th to 22nd, 1981, was the third, and so far most widely international, gathering arranged by the Institute.

The need for another chance to discuss linguistic problems in the study of impromptu speech had appeared in many talks I had had with colleagues over the years. Originally the Åbo Symposium was conceived on a more restricted Finno-Scandinavian basis. But interest in the subject so exceeded my expectations that I was encouraged to cast my net wider, so as to include representatives from several other countries as well. The response to the invitation was indeed most gratifying, with only very few of those approached sending their regrets. The symposium was attended by nineteen of the invited speakers and by a score of observers, many of whom also took part in the discussions. Judging by the interest and by the many questions posed, there will be plenty of scope for further conferences on impromptu speech, hopefully with a wider international and intercontinental coverage than that permitted by our modest apparatus.

Though the talks exemplified many approaches to the study of impromptu speech, and though this volume reproduces some papers not read at the symposium (namely those by Professor Roulet of Geneva and by Professors Loman and Nordberg and Dr Löfström on the study of impromptu speech in Sweden), many other approaches and schools of thought remain conspicuous by their absence. I originally hoped to include a larger set of regional state-of-the-art survey papers, but did not succeed in recruiting writers for a more global coverage of this dynamic and diffuse field within the brief time at my disposal. Here is a task awaiting a more persuasive conference organiser and handbook editor.

The papers have been reproduced with a minimum of editing, and that mainly of a technical and typographical kind. I have made no attempt to impose on them a single uniform terminology or structural pattern. As is right and proper, the papers thus reflect the approaches, views and styles of their writers rather than a consensus of the discussions (even where such a consensus might be said to exist). Nor have I had the audacity to attempt a summary of the debates, some of which were long and lively. A number of the points made during the discussions have presumably found their way into the final versions of the papers. The ordering of the contributions in this volume reflects their grouping under major topics in the symposium. But the arrangement remains rough at best. There is a great deal of overlap between the groups, and some papers would fit comfortably under more headings than one.

In addition to the Åbo Akademi Foundation, the Finnish Ministry of Education generously supported the Symposium with a grant. Many universities and organizations gave travel grants to the participants. Our physical welfare was enhanced by a banquet at Åbo Castle sponsored by Oy Hartwall Ab. The city of Turku/Åbo treated us to guided sightseeing. And the Union Bank of Finland gave us tools for notetaking. All our patrons deserve cordial thanks for their benevolent generosity.

February, 1982 *Nils Erik Enkvist*

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Nils Erik Enkvist
Åbo Akademi

INTRODUCTION

Impromptu speech, structure, and process

Abstract: Impromptu speech can be defined in different ways: in terms of situational context, linguistic characteristics, and real-time processing. These approaches are not contradictory: there are certain situations that call for rapid processing of spoken discourse, and the needs of such processing are reflected in the structure of the text. The degree of 'impromptuness' depends on a number of parameters including degree of scripting, extent of planning-span, and boundness to traditional macrostructural text patterns.

Texts emerging from impromptu-speech situations present special problems for the linguist, who must learn to manage a host of problems often dismissed as involving 'performance' rather than 'competence'. One way of approaching such problems is to focus on the processes involved in communication and text comprehension, and not only on the structure of texts as such.

1

Having convened a symposium on the linguistic study of impromptu speech I suppose I ought to start by providing a gloss explaining what I mean by 'impromptu'. I have deliberately avoided speaking about 'unplanned', as opposed to 'planned', discourse for the simple reason that all discourse involves planning, even at several levels. Therefore 'unplanned discourse' sounds like a contradiction. To me the collocation 'spontaneous discourse' also carries undesirable overtones. For we know there is impromptu speech which does not arise spontaneously but may be elicited from a speaker, or even extorted from him against his will. The flavour of 'unrehearsed' which goes with 'impromptu' more aptly conveys the appropriate semantic nuance.

Another term I have wanted to skirt is 'conversation analysis', though many scholars use it in a sense akin to that of 'the study of impromptu speech'. All impromptu speech is not conversation. There are impromptu monologues too. And like 'discourse analysis', 'conversation analysis' puts an undue emphasis on analysis as opposed to synthesis and generation. Linguists may of course just as well describe languages and texts through generative and synthetic approaches as through analyses in the proper sense of the term.

In the collocation 'impromptu speech', the word 'speech' also raises problems. Speech is no doubt the most common type of impromptu discourse. But impromptu dialogue may run through other channels such as telex. There are even situations where people converse in writing, with deaf friends for instance or perhaps during a meeting where the communication partners do not wish to disturb the proceedings. Such 'impromptu writing' plays a more restricted social role than impromptu speech, but it might all the same throw some light on some very general traits of 'impromptuness'.

If, then, we accept the term 'impromptu', and insist on the necessity of defining impromptu speech, we can proceed in at least three different ways.

First we can try defining it in terms of situational context, by listing those situational features that must be present if a discourse is to qualify as impromptu speech. Lists of such features have been attempted for instance by Jaakko Lehtonen, Bengt Oreström and Cecilia Thavenius in the present volume. If contextual parameters are weighted along a scale we may also find that there are texts with different degrees of impromptuness. This contextual approach might ultimately lead to the view that impromptu speech cannot be defined in linguistic terms. There would then be no 'impromptu language'. There would only be situations in which language is used impromptu.

The second, and opposite, approach would be to define impromptu speech in terms of its intratextual features, in theory both on a macro-level involving textual macrostructures and on a micro-level involving syntax. According to this principle, the exponents of impromptuness reside in the text itself and can be described in terms of syntax (including 'deviance'), the use of certain types of phrases or particles ('pragmatic particles') and fillers, the prevalence of certain types of reference, and the like. Several of the papers in this volume examine linguistic features thought to be characteristic of impromptu texts.

The third avenue is provided by language processing and thus presupposes a process-oriented linguistics. Impromptu speech differs from other genres because it is governed by the needs of real-time processing, or perhaps rather by the type of rapid processing (whether technically real-time or batch) that human beings can manage in those situational contexts that call for impromptu speech. Memory limitations and other constraints on discourse processing then become crucial in shaping impromptu texts, and they affect the texts both through the speaker's own limitations and through what the speaker, consciously or not, thinks of the hearer's message-processing capacities in each situation. In this volume, such processual views seem to underlie at least the papers by Danica Seleskovitch and Karla Déjean le Féal. Both emphasize the crucial role of cognitive competence and referential meaning in the processing of impromptu speech.

These three approaches are not contradictory. On the contrary they supplement one another. We might synthesize them into one total view by saying that there are certain types of situations which call for rapid processing of spoken discourse, whether literally in real time or in small batches, and that the needs of such processing are then reflected in the macrostructure and microstructure of the resulting texts. Such texts will be called 'impromptu'.

2

There are quite a few observations one can make about the contextual and situational characteristics of impromptu speech. One set of such observations has to do with speech in relation to writing. It has sometimes been forgotten that texts actually refuse to fall neatly into two discrete categories, spoken and written. Especially in technically advanced societies the two channels may interact in intricate ways, particularly if verbal texts (spoken, written, or both) are further supported by pictorial matter as in illustrated texts or films or tv programmes. But even apart from such technically sophisticated messages, there are common situations in which speakers combine channels. Scripted speech, that is, text read aloud from a script, is an example of a text type in which writing and speech interact. There can actually be many different types of scripted speech, depending on whether the script is complete and will be read word by word, or only gives notes which must be elaborated and completed when they are transmuted into speech. A common text type is the conference paper whose metamorphoses run from script through speech back to script: the author has written his paper to be read at a meeting, but is also (and perhaps primarily) thinking of its ultimate publication in the conference volume or in a journal. In all such instances the degrees of impromptuness correlate inversely with degrees of scripting. There runs a scale from completely unscripted speech to fully scripted speech. We must decide what part of this scale we accept as 'impromptu'.

But as I already noted, 'unscripted' does not necessarily mean 'unprepared' or 'unplanned'. There are situations in which unscripted texts have been meticulously worked out in advance, for instance when politicians state their views at an election meeting or on a tv programme. In such situations speakers may even find it expedient to camouflage thoroughly prepared texts as impromptu by adding to them fake impromptu signals such as pretended hesitation pauses or wilful syntactic deviance and repair.

In discussions of prepared texts, 'planning-spans' become relevant. A text, or part of one, has a long planning-span if it can be planned in advance and produced according to plan and without interference. Lectures for instance can often be planned, and so can those dialogues in which the planner remains in control (as cross-examiner, interviewer, etc.). Socially inferior or respondent members of unscripted dialogue on the contrary cannot control the dialogue enough for proper planning. They must adjust to whatever comes.

Thus in addition to the dimension scripted/unscripted we ought to reckon with the dimension planned/unplanned when defining what we mean by 'impromptu'. These two dimensions coincide often, but by no means always.

Another sense in which texts may have different degrees of impromptuness is their boundness to pre-existing textual patterns. There are many text types which might be termed 'slot-and-filler texts' or 'template texts' (in Swedish I have spoken about *schablontexter*) because all the speaker/writer is supposed to do is to fill in gaps in a pre-set textual pattern. When we register at a hotel or fill income-tax returns we merely write in specific pieces of information into specific empty slots. On a cline of textual boundness such texts (which play an important role in modern literate societies) qualify as maximally bound. Less bound are texts of the type of weather reports. They can be written or coded into rigid slot-and-filler forms, but can also be rewritten more freely to avoid redundant repetition and to add elegant variation, as on the tv. At yet another level a sonnet is a template text insofar as the metre and rhyme schemes can be seen as slots which must be filled with substance. A great deal of everyday conversation consists of template texts; indeed learning to fill slots in pre-set patterns is the essence of good verbal manners. Therefore we must once again decide how much freedom from slot or template structures we must require of a text to call it 'impromptu'. For instance classroom dialogue, doctor-patient interviews, and openings and closings of telephone conversations are stereotype enough to make them favourite specimens for discourse analysis, precisely because their slot-and-filler structure makes them easier to study. But if they are stereotype, to what extent should they be called impromptu? Where precisely does their impromptuness reside?

Starting out from such scales, we can place texts roughly classifiable as impromptu' into different systems of co-ordinates to show their relative degrees of impromptuness. We could for instance conceive of a three-dimensional space whose co-ordinates whould be (x) degree of scripting, (y) extent of planning, and (z) degree of macrostructural boundness (slot-and-filler structuring). Scripting varies from fully scripted to wholly unscripted, planning from fully planned to minimally planned, and macrostructural boundness from maximally formulaic to minimally formbound texts. Such variables are not completely independent of each other. Fully scripted texts are ipso facto fully planned, though fully planned texts can be completely unscripted.

Choosing a few dimensions, or scales of co-ordinates, for such classifications and measurements of impromptuness of course also involves decisions as to optimal levels of delicacy. Every speech situation involves countless contextual features, and we must choose those that are relevant to our purpose. All classifications of texts are rough at best, and they are helpful to the extent that they can contribute to the understanding of the typological characteristics of a text. They may not necessarily satisfy stringent epistemological requirements. For instance concepts such as 'planning span' or 'macrostructural boundness' will readily invite discussion and disagreement.

3

Nevertheless we can say that, in terms of our three dimensions, a maximally impromptu utterance is one that is at the same time completely unscripted, maximally unprepared (that is, minimal in planning span), and minimally bound to macrostructural templates. We can then hypothesize that maximally impromptu utterances are likely to differ most from utterances that are fully scripted, maximally planned, and maximally bound to macrostructural slot-and-filler patterns.

Whatever we think of defining impromptu speech in terms of its linguistic traits, everyday experience as well as the increasing number of reliable transcripts of impromptu texts show that such texts often do have specific linguistic characteristics. When speaking impromptu, people often hesitate, pause, get mixed up in their syntax, repeat themselves, begin sentences in one way but stop and complete them in another, go back and repair, allow their verbal communication to be interwoven with paraverbal and nonverbal actions which affect the text, and refer deictically to objects around them.

When faced with such phenomena, many of which defy traditional syntactic description, a linguist can respond in two fundamentally different ways. He may despair and give up, excusing himself by pointing out that his task, *qua* linguist, is to study language as an idealized code spoken by ideal people in ideal environments. By so doing he will define many of the prominent characteristics of impromptu speech as lying outside his domain. One classic device for the justification of such a restriction is the dichotomy between *langue* and *parole* or between competence and performance. Such dichotomies make it possible to define the linguist's territory as *langue* or competence, and to assign the less tractable phenomena of impromptu speech to *parole* and performance – and to somebody else to worry about!

The opposite policy is to note that such restrictionism, however useful it has proved to be in the history of linguistics, cannot do justice to all aspects of a natural language. One characteristic of a natural language is precisely its tolerance of departures from the strict codes of traditional syntactic description. In actual use, texts obey tendencies and principles rather than absolute rules of the kind that syntacticians traditionally try to formulate. This is why natural-language texts are built on codes with a great deal of redundancy. And to understand the basic nature of the function of redundancy in natural languages we must obviously study texts which make maximal use of redundancies. Such texts characteristically contain structures of the kind syntacticians like to call 'deviant' and which can only be interpreted thanks to redundancies at some level of discourse structure. Among the relevant text types, impromptu speech plays the greatest role in everyday communication. Other text types build more conscious effects on 'deviance', as in modernistic poetry or in such advertisements as make use of word-and-syntax play.

The difference between impromptu discourse and the written standard has often been approached in terms of norm and deviance. Descriptions of written language, in one of its socially dominant styles, have been regarded as the norm, and impromptu speech as an aberration from this norm. The fundamental reason why the written language has been chosen for norm, and speech regarded as an aberration, is to be sought in cultural background: in our civilization grammar has usually been more closely associated with writing than with impromptu speech, and writing is stable enough to favour grammatical description. It is only recently, with the advent first of the portable tape recorder and then of videotape equipment, that we have acquired the technical means for storing reasonably adequate data on real impromptu conversation.

One of the troubles with simple dichotomies between norm and deviance is that natural languages have so many norms. Every style may be seen as a norm of its own, from which the texts within this style may depart within some limits. In this sense, *langue* and 'competence' disintegrate: they do not involve one single monolithic norm but consist of many, and perhaps countless, subnorms and 'subcompetences' describing the subcodes used in each situation and style and register. This multiplicity of norms also exists in spoken language and in impromptu speech. Some styles and registers (and thus subnorms) such as informal conversation between equals allow a great deal of pausing, hesitation, syntactic confusion, repair, and other phenomena often seen as abnormalities or deviant structures. One might then say that these phenomena are sanctioned by the subnorm regulating informal conversation between equals: they are part of the norm rather than instances of deviance. To this approach one might object by saying that, though the major norms of spoken discourse may be different from those of writing (for instance because of the availability of such prosodic and paralinguistic signals as writing cannot accommodate), some features of actual speech should still be regarded as deviant. To take an extreme instance, stuttering is presumably not a feature in the norm, thought it might be common in certain types of informal conversation. If this is right, we should learn to define the subnorms of impromptu speech and also decide on precisely what we ought to regard as deviance. Altogether, all discussions of norm and deviance in language require a great deal of care and sophistication. Otherwise we run the risk of indulging in simplistic normalization.

4

Whatever our views of restrictionism and expansionism, or of norms and deviance, the exact description of impromptu discourse poses a host of special problems. To begin with, traditional methods of syntactic analysis are likely to prove inadequate at once. A first crux is that impromptu speech can be syntactically unstable. In some portions of a text a speaker may follow a well-defined syntactic code, but in other portions of the same text he may produce patterns which conflict with that very code. Such heterogeneity will vex those investigators who expect their data to be consistent. Then, traditional methods of syntactic analysis presuppose that the text can be neatly segmented into sentences and clauses. But impromptu speech is not always amenable to such neat segmentation. There are texts in which one simply cannot find units describable as syntactically well-formed sentences. When faced with such texts the linguist must either relate certain definite text segments to well-formed sentences, or abandon the sentence for some other kind of unit. This will lead him on to some very fundamental decisions. Should he actually try to write a special description – grammar – covering all the structures he finds on the surface of his impromptu texts? In real life this may be difficult because of the instability of the patterns. Or should he rather derive the deviant patterns by special transfer rules out of well-formed sentences? To do so he would have to begin by mapping the deviant structures onto well-formed ones, presumably by producing those well-formed structures that he thinks mean the same as, or are in some other respect equivalent to, the deviant ones. But how can he guarantee that his intuitions are really adequate for such a task? Indeed those who posit a biuniqueness of meaning and linguistic form by insisting that every form has a meaning of its own will at once dismiss such efforts as fundamentally misguided. And they may often be right. In poetry and many kinds of advertisements, for instance, deviance can be very much part of the meaning. Once we substitute well-formed sentences for the deviant ones, the poetry or the advertising ploy may be lost altogether.

Fortunately there seems to be a way out of this dilemma. Though impromptu speech is often syntactically deviant and unstable, it is not unstructured. But some of its structures are not syntactic in nature. They are interactional. Indeed many of the characteristic traits of impromptu speech can be explained as rising out of a clash between syntactic structures and the requirements of interaction. Whenever interactional considerations override syntactic ones the result is syntactic deviance.

Among interactional principles that may prove stronger than the syntax are those of turn-taking. Many students of pause patterns in speech have been bothered by the observation that pausing sometimes harmonizes with syntactically and collocationally explicable juncturing, but sometimes does not. The inconsistency disappears once we note that when pauses fail to coincide with linguistically predictable junctures, without owing to hesitation, they may have been interfered with by turn-taking patterns. A speaker may thus avoid stopping at a major syntactic juncture, such as the end of a text unit ('paragraph') or sentence, because he wants to avoid the risk of losing his turn. Therefore he may have to stop for breath in a syntactically odd place, such as the middle of a constituent, because here the risk of somebody's usurping the floor is less. Also when an interactional rule posits that long silences must be avoided, a person may feel that avoiding silence is more important than producing syntactically perfect utterances. Phatic necessity may thus prompt utterances that deviate from the syntactic norm. The threshold for the tolerance of silence is a matter of culture. In many countries people from one province are known for their glum silences and those from another province for their garrulity.

Another cause of syntactic deviance is the human cognitive apparatus. People's memories are limited and may be deficient, and other, simultaneous cognitive tasks or factors making normal cognitive processes difficult (such as tiredness or noise) may also interfere with syntax. If we knew enough about cognitive processes we could presumably explain precisely what causes hesitation and different types of lapses from what has been viewed as the syntactic or phonological norm.

Investigators will therefore do wisely in remembering that what seems deviant from the point of view of traditional syntax may be firmly structured from the point of view of interaction or readily explicable in terms of cognitive processing. But if we want to appreciate the interactional structuring of syntactically deviant patterns, and if we want to explain what features in language processing may lead to lapses from syntactical standards, we must venture far beyond the confines of traditional syntax. We must sign the articles of the expansionist's creed and stop taking cover behind concepts such as Saussure's *langue* or Chomsky's competence.

To many students of language, I may seem to be flogging a horse which died some years ago. For the need for a widening of the research territory of linguistics has been throughly documented. I should therefore like to summarize the recent expansion of text and discourse linguistics in terms of four major types of text models.

To begin with, students of textual cohesion used to analyse semantic and syntactic links between sentences in already existing texts. They tried to isolate and describe those features that cemented sentences into texts. The next, more ambitious step was to regard a text as a textualization of 'text atoms', that is, underlying simple sentences or predications of some kind. According to this view, texts came into being through the textualization of a set of such text atoms. The textualization was steered by a text strategy, and the same set of text atoms could be turned into a set of different texts by combining and embedding the atoms according to different strategies. Next, however, some scholars wanted to know where text atoms come from. They were no longer happy accepting predications *ex machina* for textualization. They wanted to generate, or extract, their input from out of a cognitive store. Such stores were based on models of cognition that took the form of frames and schemes (as in Minsky 1975 and Abelson and Schank 1977) or associative or cognitive networks (such as those surveyed in Findler 1979). But in operating such cognitive stores, the linguist found himself faced with yet another question, namely, why does a certain individual in a certain situation choose to extract one specific set of text atoms, and not another, out of his store? To explain this we need yet another, fourth type of text model which is capable of reckoning with interactional factors.

In this way we can distinguish four types of text models which I have called sentence-based, predication-based, cognitive, and interactional, respectively. Note that these models relate like Chinese boxes: interactional models may include cognitive models which may include predication-based models which may include sentence-based models. Without explicitly acknowledging that they are moving from one model type to another, many linguists have also tried to bring in features of cognition and interaction into predication-based or sentence-based models by using devices such as semantic fields (formalized as fields or as matrices), performative superstructures (which bring in some selected interactional features such as speaker, receptor and mode), and the focus/presupposition complex (which is interactional because it involves the speaker's estimate of what knowledge he shares with the receptor). By using such devices, restrictionist syntacticians have in fact proved the need for interactional parameters. They have tacitly acknowledged that we must venture from behind our desks into the world if we are to find the forces that govern interactive behaviour and thereby shape our texts. Impromptu speech gives us a fine window for the study of such forces.

5

Impromptu speech, then, can seem syntactically deviant because it often fails to satisfy the traditional standards of syntactic well-formedness, or grammaticality, as they have been defined for written discourse. Nor need it satisfy high standards of acceptability[1] when presented to groups of judges outside the original impromptu-speech context and situation. Also, as I already noted, impromptu speech can be syntactically unstable in that syntactic rules change, or are relaxed to different degrees, within different portions of the same discourse or utterance.

When syntactic structure proves too unstable to provide us with a firm basis of description, our problem is to find something else to build on. Interactional structures such as those of the speech-act theorists (Searle 1969, Sadock 1974) or students of classroom dialogue (Sinclair and Coulthard 1975) or of turn-taking (e.g. Duncan and Fiske 1977, Schenkein 1978) offer us one such foundation. Another solution would be to look for invariance in the processes of text production and text interpretation. One would then start out by postulating that any text that succeeds in triggering off the desired process of interpretation in a given situation is, communicatively, a success in that situation. Therefore the process must be as important as its trigger structure, if indeed not more so. If this argument is right, we should look into our chances of setting up a process linguistics, a linguistics which tries to analyse and describe processes and not only the structures that trigger them off.

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[1] I am here using 'grammaticality' to indicate the relation between an utterance and an existing grammatical description of the language (utterance A is grammatical in relation to grammar G if G generates, or otherwise approves of, A), and 'acceptability' to indicate what a group of suitably selected judges say about, or can do to, an uncontextualized utterance or structure. 'Appropriateness' would be the term for what judges say about the situational and contextual decorum of an utterance or utterance feature. 'Appropriateness' thus turns into contextual acceptability.

In this light it is hardly surprising that a very large number of recent publications, books and articles in linguistics carry the word *process* or *processing* in their title. Such a markedly processual stance has been prompted by two different motives. First, processes provide us with a stable and invariant base when we have to describe texts with unstable syntactic structures. Secondly, many students of language are directly interested in language processing, either studying it for its own sake as pure scientists (like psychologists and physiologists) or because they want to learn to imitate it and to apply it to practical problems (like students of artificial intelligence and of rhetoric and translation). There seems to be no reason why these categories of investigators could not join forces when assaying their common problems. The student of impromptu speech too stands to gain from a knowledge of the results gained in processual psycholinguistics and in artificial intelligence.

Such a process linguistics[2] will of course not be hostile to structural description. On the contrary, a process by definition involves a change of one structure into another, and to describe processes we must therefore be able to describe structures. Thus even those whose interest is in processes will have to set up structures: witness for instance the frames and schemes of students of artificial intelligence. To study *energeia*, to speak with Humboldt, we should not throw out the *ergon* with the bathwater. The distinction between a structuralist and a processualist does therefore not lie in a mutual disdain of one's colleague's tools. The difference is rather one of emphasis. A processualist wants to use structures to explicate processes. And a structuralist must often make use of processes to explicate structures. We should recall that the most basic structural units such as phonemes and morphemes were in fact defined processually even by the most convinced structuralists. They gave us explicit operational instructions for the segmentation of the speech stream, and what came out of this segmentation process was a set of phonemes or of morphemes. Thus the structuralists made excellent operational use of processes. In generative-transformational grammar the processes became even more conspicuous and explicit. Every phrase-structure rule and every transformation in effect describes a process through which one structure changes into another. Instructions for the format and writing of generative rules can be regarded as instructions for process description.

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[2] The term 'procedural linguistics' is also in use. I prefer 'process linguistics' because all linguists, whether processualists or not, of course make use of procedures of some kind in their work. 'Processual' is less opaque than 'procedural' because it directly reveals the emphasis on process.

There is, however, one major difference between the processualist and the structuralist. The structuralist's task was to describe structures. When he needed processes he could tailor them freely and *ad hoc* to fit his descriptive purposes. His segmentation processes or phrase-structure rules and transformations (and here the transformationalists should still count as structuralists because their units are defined in relation to each other and as parts of structures) were not patterned on processes known to us from outside linguistic analysis. On the contrary, the processualist likes to pattern his processes on models he has found outside the description of language. He looks for models for them in the empirical studies of psychologists, neuropsychologists and psycholinguists. His models may involve considerations of economy known to us from information theory, for instance in terms of entropy. They may evoke principles we are familiar with from rhetoric as teleological tenets of effective communication, or from literary studies or narratology as principles of textual macrostructure. And they may be based on computer operations. Patterning linguistic processes on computer analogies is indeed a basic requirement for operations in artificial intelligence, which tries to imitate intelligent human behaviour, including the analysis and production of texts, by machine.

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Though there need be no inherent antagonism between structural linguistics and process linguistics, the latter can still profit from a conceptual frame of its own. Indeed we can hardly speak about a proper process linguistics unless it has a set of concepts peculiar to itself.

There has been a great deal of discussion over the years about analogies between natural languages and semiotic systems such as money. Many scholars also keep coming back to analogies between sciences such as chemistry or mathematics or physics, and linguistics (so for instance Zwicky 1980). Linguistic units obviously combine in ways to some extent analogical to those in which atoms and molecules form larger units, and ways of looking at language have been compared to the particle, wave, and field models of physics. Entropy is another concept useful to linguists. It is thus worth while to look around for theories and models developed in other fields and see whether they are applicable to the study of natural languages. For the student of processes it is natural to see whether the Decision Theory developed by students of economics and business administration might be of use (see e.g. Bross 1966, Kaufmann 1968, Lindström 1971, and Raiffa 1968). Decision theory is relevant to students of processes because processes are made up of decisions, and can therefore be described in terms of decisions and chains of decisions. In the following I shall rehearse and define a few basic concepts related to decisions that I think will be of potential use to process linguists.

Processes consist of actions. Whenever there are alternative actions, the process is determined by a choice involving a decision. Every point at which a decision has to be made can be called a decision point. We recognize that we have arrived at a decision point by the presence of a set of decision criteria: when we observe the presence of a certain combination of such criteria we realize that the time has come when we must make a decision.

All students of volitional human behaviour must assume that such behavior is goal-directed. This means that the causalities underlying our actions ought to be described teleologically. To reach a certain goal we must have a strategy. When a strategy is applied to a concrete situation it becomes a plan. Strategies, and their concretizations into plans, recommend decisions (and thus actions) in terms of sets of weighted decision criteria. At each decision point we make an inventory of the decision criteria that are present, we weight them positively or negatively according to the specifications given in the goal-oriented strategy, and we then make our decision accordingly. Depending on the degree of certainty of the weighting we can speak of different types of decisions. A decision is determinate if we can weight the decision criteria exactly and thus fully predict the consequences of each alternative action. A decision is statistical if, thanks to projections of past experience, we can foresee the consequences of the possible actions with only a certain degree of probability. This degree of probability will determine the trustworthiness of our weighting of decision criteria. Finally, a decision can be labelled as stochastic if we are unable to predict its consequences. When making stochastic decisions we are compelled to act randomly and blindly because we cannot relate the decision to past experience.

Strategies too arise through processes involving decisions. There are thus strategy-forming processes as well as strategy-executing processes. In actual fact strategies form an extremely complex hierarchy of superstrategies, strategies, substrategies, sub-substrategies, and so on. Such hierarchies may vary with the situation. And a naive speaker may be as unable to describe them as he is of describing the syntactic structures he is using.

In many instances we can check on the correctness of a decision. In addition to decision points we can thus speak of confirmation points, meaning points where we find out whether a decision was right or wrong. The relation between a decision point and a confirmation point in syntactic and semantic analysis can be neatly illustrated in so-called garden path sentences such as *The canoe floated down the river sank.* Past experience suggests that *the canoe* is an active subject and *floated* its active verb, because such a structure would be statistically most likely. The collocation *the canoe floated* also supports such an analysis. It is only when we come to *river sank* and note that *river-sank* cannot be a compound substantive that we note that *sank* must be the active verb. We then have to go back and re-analyze to find the correct structure: *The canoe (which was) floated down the river sank.* In this type of garden-path sentence, the confirmation point lies within the sentence. In other types of ambiguous sentences, the confirmation point may lie in the text or in the situation. Thus to see whether *Have the boys cut the grass* is a question or an imperative we must either have access to the intonation, or rely on the textual and situational context. Note that an unambiguous structure can be defined as one where decision point and confirmation point coincide. Therefore if we want to compose texts with minimum opportunities for misinterpretation and minimum needs for cumbersome backtracking we ought to make the confirmation points coincide with decision points. Texts where confirmation points follow closely upon their decision points are less taxing for the receptor than texts where distances between the two are great. It would be a worthwhile task also to make an inventory of the devices languages use to insert special confirmation signals into syntactic structures. I take it this is the function of the otherwise meaningless Finnish *niin* in structures such as *Jos sinä tulet niin minä lähden.* The task of *niin* is to confirm the place of a boundary, here between clauses, so that the receptor need not try to fit the first item of the latter clause into the former clause. *Niin* could be called an early-closure marker: it prevents us from letting constituents run on.

Whatever concepts and frames we may find expedient, a processual frame of thought should be useful to the linguist in two ways. First it reminds him of the teleological aspects of communication, of the importance of goals and purposes which may motivate departures from ordinary syntactic well-formedness. Turn-taking strategies may cut across and override syntactic patterns, and cognitive processes may interfere with syntax. Feedback from the receptor enables us to monitor and, if need be, revise our strategies. Sometimes we need not pursue a sentence to the end because the receptor has understood us already. And sometimes we may have to repeat, to clarify and to expand our text, to reduce the tempo and increase the loudness, because otherwise the message does not go across. Syntax is merely the handmaiden and exponent of strategy-controlled communicative processes. And syntactic structures do not exist for their own sake. They are subordinate to communicative strategies and processes. If we want to understand why a sentence looks the way it does, we must refer it to the strategy which controls the interaction and the text.

Secondly, thinking of language not only as structure but also as process will set a premium on those descriptive models that illustrate processes, or at least give us tools for so doing. This applies both to models that produce discourse and to models that analyse discourse. What the process linguist is looking for is 'performance models', in both the everyday and the technical sense of 'performance'. To begin with we should test the processual adequacy of available grammar models. Transformational grammars are capable of modelling the genesis of well-formed sentences as processes. But they bring in discoursal features only in the form of a few parameters of sentence generation such as peformative superstructures, some distinctions between old and new information, and the like. Thus they are seriously embarrassed by syntactically deviant, though interactionally acceptable, structures. Systemic grammars of the Halliday type give network presentations of a wider range of strategic and interactional choices. The most explicitly processual approach exists in grammars set up for automatic parsing such as Augmented Transition Network grammars (ATN grammars: see Kaplan 1972 and 1975), or those of Marcus (Marcus 1980) or Welin (Welin 1980) or Sager (Sager 1981). How to handle the indeterminacies characteristic of natural languages and human communication with the aid of deterministic machine algorithms is always a major crux in automatic parsing, nor is it easy to see how an automatic parser could learn to imitate a human being's ability of extracting contextual sense out of syntactically ill-formed utterances. The point is of course that syntactic parsing is just one of the many processes that interact to produce text interpretation. Parsing must be supplemented by other processes such as referring sentences to semantic frames or schemes (Minsky 1975, Abelson and Schank 1977). But frames and schemes have their problems too. One of them is infinite regress: the concepts that enter into one scheme need explication in terms of other schemata, and so on perhaps ad infinitum. Thus machines will probably only manage problems which can be simplified to avoid such infinite regress. To handle the full complexity of communicative processes in the full complexity of their physiological, psychological and sociophysical setting we shall always need men and women of flesh and blood.

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23

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Non-verbal aspects of impromptu speech

1. The definition of 'non-verbal'

Non-verbal communication is one of the new fields of interest. In recent years it has found its way also into linguistic studies of spoken language. Research into non-verbal phenomena has given birth to a bulk of studies which emphasize the complexity of communication and the role of the non-verbal aspects of human interaction (cf. Key 1977, 1980; Boileau 1981; Obudho 1979).

For some reason, many discussions of non-verbal aspects of communication begin with an elucidation of the author's background. This often sounds like an excuse to readers whose background is not in linguistics, social psychology or, perhaps, psychiatry. This kind of cautiousness reflects the fact that, after ten years of progress since the classical works of Mehrabian, Argyle, Birdwhistell, Knapp and others, non-verbal communication is still regarded as a vague and indistinct concept. The existence of numerous non-scientific, popular books on 'body language' may also have given birth to healthy criticism of the entire field of non-verbal communication. In one of his articles Robert M. Soucie lists some popular misconceptions about non-verbal communication (Soucie 1979). Although Soucie's discussion is concerned with the layman's general misconceptions, much of what he says could be said of linguists' attitudes too. The common notions discussed by Soucie are: (1) non-verbal communication covers only a minor part of interpersonal communication and, for intelligent people, at least, language is the primary and the only major communicative medium during interaction; (2) everyone acquires automatically a sufficient degree of non-verbal communication skills in daily encounters; because of this natural process, the teaching of non-verbal communication would be a waste of time, and (3) an average person is little aware of his non-verbal behaviour, which is good, as a matter of fact, since too much awareness of non-verbal communication would be a threat to one's 'information preserve'. Awareness of non-verbal communication would inevitably produce a society of liars; therefore the study of non-verbal communication cannot be anything but dangerous meddling.

Another widespread misconception is the idea that non-verbal communication forms are 'primitive precursors' to verbal language and that non-verbal communication is just a less explicit variant of the verbal mode. Wiener *et al.* (1980:278ff.) point out, however, that verbal forms are as much a substitute for non-verbal forms as the reverse, and that translations from the non-verbal mode into language often lose as much of their content as idioms or metaphors lose in translation from one language into another.

What is meant by non-verbal communication, what is it used for, and what is its relation to the verbal part of discourse in general, especially with regard to the impromptu aspects of speaking? Linguistic, or grammatical, and communicative approaches differ in their attitudes towards the non-verbal variables. For a linguist, non-verbal features are normally co-occurring phenomena, which are of interest only if they somehow modify the verbal message or explain the flow of the linguistic text. Very few linguists seem to share the view which Mary Ritchie Key (1980:vii) presents as a starting point to the analysis of the relationship of verbal and non-verbal communication. According to Key, "When human beings interact, language, in a linguistic sense, may or may not occur, but extralinguistic correlates *always* occur . . . the main channel of communication between human beings very often is not language."

As Mark L. Knapp (1978) points out, the term *non-verbal* is subject to a variety of interpretations – in this resembling the term *communication.* Knapp classifies non-verbal phenomena into five main categories: (1) *kinesic behaviour*, ie. body motions, which in turn can be emblems (eg. the victory sign of Churchill), illustrators (non-verbal acts which are tied to speech and illustrate what is being said verbally), affect displays (primarily facial configurations), regulators (which tell the speaker to continue, repeat, elaborate, hurry up, give the interlocutor a chance to talk, etc.), and adaptors (such as wiping the corner of the eye, scratching the hair, and other functions which are not intended but which may be triggered by verbal behaviour in a given situation); (2) permanent *physical characteristics*, such as general attractiveness, odours, skin colour, etc.; (3) *touching behaviour*, ie. actual physical contacts; (4) *paralanguage*, which includes vocal qualities such as pitch range, rhythm, tempo, articulation control, and other non-phonological features of the speaking voice, as well as various vocalizations like laughing, crying, marked inhaling, clearing the throat, hesitations, or such things as "uh", "um"; (5) *proxemics* or the use and perception of social and personal space, and the use of personal territory; (6) *artifacts* such as perfumes, clothes, eyeglasses, pipe, hairpieces, and so on; and finally (7) *environmental factors*, which include the furniture, interior decorating, noises or music and the like within which the interaction occurs (see Knapp 1978: 12ff.).

2. Defining communication

The list of non-verbal phenomena in section 1 easily gives the impression that non-verbal communication is a label for a dustbin where everything but the linguistic form of the message has been thrown. Such an impression may be, in part, due to the vagueness of the concept of communication. Barker and Collins, for instance (quotation from Harper *et al.* 1978), argue that "non-verbal communication is much broader than non-verbal behaviour. A room devoid of behaving, living things communicates atmosphere and function. Static clothing communicates the personality of the wearer." Such a view of communication clearly leads to a chaos of messages sent by pencils, carpets, wallpapers, trees and the stars! For communication proper there must be something which is part of active behaviour, which again is part of a shared code. Harper, Wiens and Matarazzo (1978) arbitrarily limit their consideration of non-verbal phenomena to those that are most important in the structuring and occurrence of interpersonal communication and the moment-to-moment regulation of interaction. A more accurate definition of non-verbal communication seems necessary. My own suggestion is that, to be regarded as communication, non-verbal behaviour should be intentional and goal-directed, but it need not necessarily involve a conscious choice by the speaker. Both the sending and the interpreting of non-verbal signals very often takes place at a subconscious level or below the focus of conscious attention. Much of what is sometimes taken to be non-verbal communication is not *communication*, because the behaviour in question was not chosen intentionally in order to affect the interlocutor or is not under volitional control at all. Pupil dilation, for instance, which may signal sexual arousal or anxiety to the observer, is not communication, because the phenomenon is an automatic physiological response which cannot be volitionally controlled.

Yet the borderline between 'passive', uncontrolled, non-volitional symptoms of emotional and physiological states and intentional, consciously controlled and addressed non-verbal communications is vague. According to a very strict definition of communication, a smile, for instance, is a piece of communication only if it is intentionally pretended! This does not mean that unintentional behaviour or static environmental and other factors have no role in the development of the interactional situation. The more sensitive the listener or the other interactants are non-verbally and socially, the more cues they are able to exploit concerning the interlocutor's emotional state, attitudes, standard of living, state of health, social position, and so on. But this is not information sent to him by his interactant; it is based on the use of his own internal knowledge. Discovery of a cigarette stump, a smudge of lipstick on a collar, or books on a shelf may suggest important pieces of information to the observer, ie. these findings may be of high informative value to him, but they are not communication.

Gestures, mime, and body movements and positions are all important elements in the regulation of human interaction, in the exchange of affective information, and also in the processes of encoding and decoding attitudes towards the interlocutor or towards the topic under discussion. Textbooks of speech communication frequently cite the percentages from an early work by Mehrabian (1968:53) which indicated that up to 93 per cent of people's first impression of the interlocutor is based on non-verbal cues. Some of the writers misinterpret, however, the data given by Mehrabian and state that 93 per cent of all human communication is non-verbal. This is of course absurd.

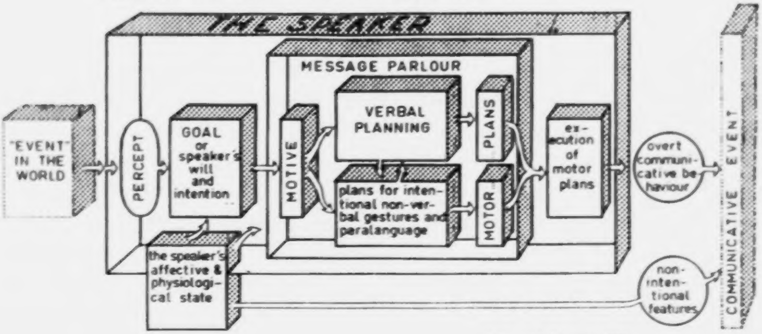
3. Non-verbal features in the communicative event

What is the interrelationship between non-verbal studies and linguistics? Recently, many scholars have emphasized the importance of the non-verbal channel in human communication. For John Lamendella, for instance, language and NVC are alternative output channels based on neural processes on the same level: ". . . the so-called extralinguistic and non-verbal aspects of communication aren't mere window dressing that accompany sentences optionally but a fundamental ingredient of the process by which people decode and encode messages. Many propositional and symbolic components of communicative interactions are not expressed by linguistic means but rather by way of conventionalized manual gestures, body movements, facial expressions, and prosodic elements beyond phonology" (Lamendella 1977: 158).

The complexity of communicative signals has also been frequently emphasized in the literature. The combination of verbal and non-verbal elements in the messages has been found to be so intricate that the understanding of verbal communication is not possible without reference to the non-verbal components. For linguistic analysis this is an important question. Should non-verbal structures and rules be incorporated in the study of language and in the rules of grammar? Or should word and non-word behaviours be studied as separate entities? Or is it indeed impossible to analyze and describe language without reference to the non-verbal system? The opposite formulation of the question is, of course, whether non-verbal behaviours should and could be studied in isolation separated from the linguistic structures and hierarchies (cf. Lehtonen 1980). The answer to these questions depends on what we want to know about language and communication. If the entity to be analyzed is language or the structure of grammar, it should be seen as an autonomous signifying system which must be described and analyzed without reference to any 'concomitant' systems; if the object of the analysis is not language but the system of human communication, any attempt to implement the analysis without the non-verbal parameters will certainly fail. It goes without saying that the description of the development of an interactive situation is not possible without the observation of the non-linguistic messages exchanged between the participants.

Figure 1 illustrates a model of the progression of communicative events developed by the Jyväskylä research group (cf. Sajavaara 1980). The dotted cube on the right stands for the entire communicative event, or the overt audible and visible behaviour of the speaker. This behaviour consists of both intentional and addressed behaviours, verbal and non-verbal, and of the non-intentional and non-addressed and subconsciously controlled phenomena. For the listener, or the interpreter, all of this, together with the simultaneous contextual cues, forms an indivisible communicative event, which in turn is the input for his percept and reactions. According to the model, the percept of the external world, the intake, is not decoded as such; it is processed in reference to the communicative goals of the person. This interpretation, in turn, may result in a motive for a communicative move and the activation of the "message parlour". The goal and the event in the external world as a trigger to a communication response are also found in the motor skill model of Michael Argyle (1969).

FIGURE 1
A MODEL OF THE PROGRESSION OF COMMUNICATIVE EVENTS


THE SPEAKER
MESSAGE PARLOUR
"EVENT" IN THE WORLD
PERCEPT
GOAL or speaker's will and intention
MOTIVE
VERBAL PLANNING
plans for intentional non-verbal gestures and peralanguage
PLANS
MOTOR
execution of motor plans
the speaker's affective & physiological state
overt communicative behaviour
non-intentional features
COMMUNICATIVE EVENT

Lehtonen & Sajavaara 1980

Figure 1. A model of the progression of communicative events.

Michael Argyle (1979) puts forth an interesting question: why is non-verbal communication used despite the fact that we have language? He lists a number of reasons: (1) Non-verbal communication is used to express attitudes like superiority/inferiority, dominance or submissiveness, warmth and coldness, attraction or dislike. For expressing interpersonal attitudes the non-verbal way is more dynamic than the equivalent verbal message among other things, because it allows the conveyance of information without directing attention to it, eg. "I am socially superior to you" or "I dislike you a little". (2) The non-verbal channel can be used to express emotions like depression, anger, anxiety, joy, surprise, fear, disgust or contempt. Each emotion signalled can be true or pretended. (3) Non-verbal communication is used for sending feedback signals or other signals when the verbal channel is occupied. (4) Non-verbal communication forms parts of several rituals in in social situations like greetings, farewells, and so on. (5) Non-verbal behaviour is used to regulate the communicative flow between the interactants. The turn-taking mechanism as a whole consists of both verbal and non-verbal behaviours. (6) Non-verbal behaviours are also used for self-presentation. By means of non-verbal communication the speaker can give information about himself to the listener. (7) Last but not least, non-verbal communication is used to complete and elaborate the verbal utterance. Knapp (1978) lists the following possibilities: (a) non-verbal behaviour can substitute for verbal messages, (b) it can modify, or elaborate on, verbal messages, (c) it may accent or emphasize parts of the verbal message much as written words can be emphasized by means of underlining or italicizing.

The factor which makes the complete analysis and classification of non--verbal phenomena difficult, if not impossible, in practice is their multifunctionality: for the speaker, non-verbal behaviours are not only signals to be used instead of verbal messages. Non-verbal behaviours also serve for him as means to signal social roles and interpersonal attitudes. A speech situation is not merely an event in which a linguistic text was produced but also an extract of human interaction which actualizes both the individual speaker's goals and motives, communicator style, interpersonal attitudes, diverse personal and social stereotypes, and the social perception of the interactants (cf. Burgoon and Saine 1978: 144ff.).

In addition to the strictly communicative functions listed above, the non-verbal variables may also serve in other functions in interaction and message processing. Woodall and Folger (1981) suggest, for instance, that non-verbal contextual features may serve in memory as cues for the retrieval mechanism for co-occurring language episodes. According to their theory, non-verbal cues should be included in the contextual encoding conditions which can provide access to the co-occurring linguistic information. The memory retrieval function of non-verbal features seems to be of importance, however, only in such disambiguation conditions where the non-verbal cues are not synchronous with the patterns of speech (cf. Woodall & Folger 1981: 53).

4. Message planning and impromptu speech

Textbooks of speech communication are unanimous in their definitions of impromptu speech (cf. e.g. Brooks 1978 and Ehninger *et al.* 1978). According to the textbooks, a speech may be *impromptu*, ie. delivered spontaneously without prior preparation, it may be *extemporaneous*, ie. planned in advance but presented freely, it may be *memorized*, ie. carefully prepared, committed to memory, and read by rote, or it may be a *manuscript delivery*, ie. a speech read from a written manuscript.

Speech in everyday speech situations, in casual conversations, in meetings and conferences, in classes and other group situations is normally either impromptu or extemporaneous. The situation is purely impromptu only if the speaker has not at all been able to predict the speech situation nor the subject of the speech or discussion. In the impromptu situation the time lag between the planning and the actual performance is minimal. The speaker has to have recourse, on all levels of planning, to automatized structures or stereotyped principles of message organization.

An impromptu talk takes place entirely on the spur of the moment. If the speaker is informed in advance of the speech situation, of the subject, and of the interactants or the audience, his performance is not any more impromptu but extemporaneous. Even if he does not make any notes for the speaking situation, he however subconsciously analyses the situation, makes strategies, collects data, activates vocabulary, and formulates his thoughts and opinions.

Accordingly, the form of speaking which is traditionally called extemporaneous is extemporaneous only at some rather low level of processing the linguistic form and at actual delivery but "pretemporaneous" or created prior to the time of delivery on the higher form and content levels (cf. Asante & Frye 1977: 177). A tentative classification of speaking types in terms of the immediacy of planning is given in Table 1.

When a person is speaking on the spur of the moment, the planning of the discourse takes place in the actual situation with a minimal or no time lag between the planning and the execution. Both the verbal and non-verbal choices are spontaneous, ie. not suggested by any prefabricated plans made for this particular speech situation. In a non-impromptu extemporaneous situation the speaker may have access to a prefabricated general outline of his talk, although the final syntactic and lexical choices remain spontaneous.

In memorization and in reading aloud, even the syntax and vocabulary are predetermined.

☐ = planning takes place prior to delivery

▨ = planning takes place immediately prior to or during the actual delivery

	episodic structures, textual choices, vocabulary	syntax, actual wording	speech delivery (pronunciation, pausing etc.)	nonverbal behaviour
impromptu, or spur-of-the-moment speaking	▨	▨	▨	▨
extemporaneous speaking	☐	▨	▨	▨ ?
memorized speaking	☐	☐	▨	▨ ?
manuscript delivery	☐	☐	☐	▨ ?

Table 1.

Preplanning vs. spontaneity of the non-verbal parameters is a more complicated issue. Some of the non-verbal features can be planned ahead unconsciously when selecting the register of speaking (formal or informal), the degree of intimacy, politeness or hostility and other attitudes to be expressed in the actual speech situation. It is, however, more plausible to assume that the actual choice of the tone of voice, patterns of gaze, gesticulation and individual postures all are executed on the spur of the moment both in impromptu and extemporaneous speaking but also when making a speech by rote and when reading aloud a written manuscript.

5. The shared knowledge and the non-verbal channel

Just as the concepts 'non-verbal' and 'communication', also 'impromptu speech' seems a little fuzzy. The term impromptu itself refers to the unexpectedness and spontaneity of the speech situation. However, the impromptuness of the situation for the speaker depends on several external and internal factors: what is known about the interactants, what is the degree of formality/intimacy of the situation and what are the speaker's communicative goals and motives in that very situation?

One extremity of impromptu speech with respect to context, address, intention, and discourse history is a laboratory situation in which the speech is a context-independent, non-addressed monologue with a zero-history or a discussion between persons who have never seen each other and have never entered a discussion together about anything. The other extreme is a real-world situation in which a piece of communication is addressed and intentional, both the verbal and the non-verbal channels are put to use and the content of the discourse includes both cognitive and affective components. A real-world situation means a move of interaction in a given environmental setting. It is addressed to a person who shares a given amount of shared interest and knowledge with the addresser. In most real-world situations there also exists a history of earlier talks, contacts, and other experiences between the interactants. From the perspective of the researcher, the first, ie. the zero-history, situation is easier to handle. It is therefore the way in which the analytical studies of impromptu speech could proceed: in laboratory situations the number of intervening factors is reduced to the minimum. The task of abstracting the linguistic rules relevant for casual conversation as well as other stereotyped internal generalizations which cause and explain certain regularities and expectancy in impromptu conversation is much more difficult in normal live discussions. On this level, the 'non-verbal' social, cultural, and personality cues, but also things like personality characteristics, the person's cognitive style and his experiences, become more decisive.

Although it is impossible to calculate exact percentages of the relative importance of the non-verbal channel as compared to the linguistic messages, some suggestive hypotheses of the role of the verbal and non-verbal channels in various communicative situations can be outlined. It seems reasonable to hypothesize, for instance, that the relative communicative load of the non-verbal elements in discourse as compared to that of the verbally-coded propositional content is related to the cognitive style of the speaker and to the type of discourse.

Communication styles can be divided, according the terminology adopted by Basil Bernstein, into particularistic and universalistic. In particularistic communications, the meanings are tied closely to the context; typically they deal with some concrete events or objects and work efficiently only if the participants attend to the same context, make the same assumptions of the external world, and also share a common data base. The linguistic form of a particularistic communication is elliptic and exophoric as consequence of the fact that the communicator refers to the concepts and matters by means of non-verbal signs. These elements substitute for parts of the verbal message and thus cause the ellipticity of the text. The more universalistic the communication style is, or the more abstract, general, and cognitively demanding the message to be conveyed is, the less the speaker can resort to elliptic structures, external reference, and non-verbal communication. Depending on the personal style of the speaker, non-verbal means can still be present but these are no longer important for the understanding of the message. Non-verbal cues may still reveal information to the listener about the emotional states and attitudes of the speaker but this information is not crucial for the interpretation of the linguistically well-formed and non-ambiguous verbal message. The only function of non-verbal communication which preserves its relative importance is the modification and elaboration of the linguistic signal. As a summary, the importance of the non-verbal channel depends on the function of the discourse, which normally also determines the communication style as more particularistic or more universalistic: informative discourse involves a higher dependence of information on the linguistic code, while emphasis on the social and expressive function also means greater dependence on the non-verbal channel.

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Echanges, interventions et actes de langage dans la structure de la conversation*

Abstract: Early speech-act theorists used to study isolated speech acts, often in terms of single sentences invented by the investigator. Their work led to interesting observations but also suffered from obvious limitations. We now know that speech acts ought to be investigated by looking at utterances in their full interactional context. This paper attempts to set up a hierarchic model of the structure of conversation which is sensitive to interactional parameters appearing in real-life dialogue.

La théorie des actes de langage, d'Austin et de Searle aux linguistes travaillant sur l'énonciation, s'est longtemps centrée sur l'étude d'actes de langage isolés, à partir d'exemples forgés par les chercheurs. Cette approche a conduit à des hypothèses intéressantes, en particulier sur les relations entre la structure de l'énoncé et la force illocutoire de l'acte qu'il réalise (voir Cole & Morgan 1975 et le No 32 de COMMUNICATIONS). Elle présente néanmoins de sévères limitations, relevées par Wunderlich (1979), et de nombreux linguistes aujourd'hui, sous l'influence d'ethnométhodologues comme Goffman et Sacks, s'efforcent de resituer l'étude des actes de langage dans les domaines plus larges de l'interaction en face à face et de la structure de la conversation (voir en particulier Labov & Fanshel 1977).

Nous allons esquisser tentativement, à partir de quelques principes simples, un modèle hiérarchique de la structure de la conversation, qui permettra de repérer des constituants à plusieurs niveaux et différents types de relations. Rappelons que, pour Goffman (1973, 1974), l'interaction sociale est guidée principalement par le souci des participants de ne pas perdre la face. Or, comme l'ont montré Brown et Levinson (1978), tout acte illocutoire, qu'il s'agisse d'une assertion ou d'une requête, constitue une menace potentielle pour la face des interlocuteurs. Si je dis à mon voisin, dans la salle d'attente de dentiste *Il fait vraiment chaud aujourd'hui* ou *Est-ce que vous avez fini de lire le Monde?*, je crée tout à la fois une menace potentielle pour ma face, car mon voisin peut m'ignorer ou me rabrouer, récusant ainsi mon droit à la parole et me plaçant dans une situation pour le moins embarrassante, et une menace pour la face de mon interlocuteur, car j'empiète sur son territoire et le mets dans la situation de réagir, positivement ou négativement, alors qu'il s'en tenait à un comportement d'évitement. Ce caractère intrinsèquement menaçant de tout acte dans l'interaction sociale a entraîné, selon Goffman, le développement de processus de *figuration* (*face work*), qui visent précisément à neutraliser ces menaces potentielles pour les faces des participants. Or, ces processus déterminent dans une large mesure un modèle de structure de la conversation à deux niveaux: *échange* et *intervention*, et influencent à un troisième niveau la réalisation des *actes de langage*.

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* Le lecteur trouvera une version beaucoup plus élaborée de cet article, ainsi que d'autres contributions de chercheurs de Genève, dans le no 44 des ETUDES DE LINGUISTIQUE APPLIQUEE (Paris, Didier, 1981) intitulé *L'analyse de conversations authentiques*.

Mon intervention inopinée dans la salle d'attente introduit une rupture dans l'équilibre interactionnel, marqué par le silence de part et d'autre, qui y régnait. Cet équilibre ne peut être rétabli que par une intervention de l'interlocuteur ou une série d'interventions du locuteur et de l'interlocuteur; l'ensemble des interventions, de la rupture au rétablissement de l'équilibre, constitue un *échange*. On peut distinguer, avec Goffman (1974), deux types fondamentaux d'échange: les *échanges confirmatifs*, qui visent simplement à entretenir ou à confirmer une relation établie, et les *échanges réparateurs*, qui visent à neutraliser les effets potentiellement menaçants d'une intervention pour la face de l'interlocuteur. L'échange confirmatif, dont l'exemple le plus courant est l'échange de salutations, est généralement formé de deux interventions:

A: *Bonjour, Monsieur.*
B: *Bonjour.*

L'échange réparateur comprend en revanche généralement une intervention de l'interlocuteur visant à satisfaire cette requête et une nouvelle intervention du locuteur visant à évaluer la manière dont sa requête est satisfaite; par exemple:

A: *Tu peux me passer le pain?*

B: *Volontiers.*
A: *Merci.*

Nous pouvons donc faire l'hypothèse, avec Goffman, qu'une conversation se présente toujours comme un échange ou une succession d'échanges, constitués généralement de deux ou de trois interventions.

Les processus de figuration déterminent la structure de l'échange à un deuxième niveau. La requête que j'adresse à mon interlocuteur sera plus aisément satisfaite si je la prépare et si je la justifie, car ces actes contribuent à neutraliser la menace potentielle que comporte la requête isolée. Par conséquent, généralement, le premier constituant d'un échange réparateur ne sera pas un acte isolé, mais une intervention, ici une intervention de requête, formée d'un acte central, que nous appellerons *acte directeur d'intervention*, et d'actes subordonnés à celui-ci, de préparation et de justification. Il peut arriver naturellement, comme dans les deux échanges élémentaires ci-dessus, qu'une intervention ne soit constituée que d'un seul acte, mais c'est un cas particulier de la structure générale.

Nous pouvons dès lors poser, pour toute conversation, une structure à trois niveaux hiérarchiques: échange, intervention et acte de langage, selon le schéma suivant (le nombre et la position des actes subordonnés ne sont pas pertinents):

ECHANGE	INTERVENTION DIRECTRICE	acte subordonné
		acte directeur
		acte subordonné
	INTERVENTION	acte subordonné
		acte directeur
		acte subordonné
	INTERVENTION	acte subordonné
		acte directeur
		acte subordonné

Les interventions remplissent manifestement les fonctions illocutoires, identifiées par une paraphrase à l'aide d'un verbe performatif (cf. Roulet 1978), qu'on attribue d'habitude seulement aux actes; un échange peut être formé d'une intervention de requête, suivie d'interventions d'acceptation et de remerciement. On distinguera les fonctions illocutoires *initiatives*, comme l'assertion, la demande d'information ou la requête, qui occupent la première intervention, des fonctions illocutoires à la fois *réactives et initiatives*, comme l'acceptation, le refus ou la demande de confirmation, qui occupent la deuxième intervention, et des fonctions illocutoires *réactives*, comme l'évaluation et le remerciement, qui occupent la troisième intervention et permettent de clore l'échange. L'intervention de fonction illocutoire initiative, généralement la première, commande les autres; nous l'appellerons *intervention directrice d'échange*. On distinguera bien l'intervention directrice d'échange, ici l'intervention de requête par rapport à l'acceptation et au remerciement, de *l'acte directeur d'intervention* défini précédemment, à savoir l'acte de requête par rapport aux actes de préparation et de justification.

Il reste à définir, pour bien saisir la structure de l'ensemble, un type de relation entre les constituants qui est ignoré par la théorie classique des actes de langage. Examinons l'intervention de requête suivante:

a. *Je ne connais pas bien Genève;*
b. *est-ce que vous pouvez m'indiquer une bonne librairie,*
c. *car je cherche un livre sur Calvin?*

On observe ici deux actes de langage qui, d'un point de vue illocutoire, sont des actes d'information. Cette caractérisation illocutoire, qui rend compte de la fonction de l'acte isolé, est manifestement insuffisante pour rendre compte de la fonction de chacun de ces actes dans l'intervention. D'où la nécessité, démontrée par Aston (1977), d'introduire à côté de la caractérisation illocutoire des actes de langage, une caractérisation *interactive*. Si *a* et *c* sont bien des actes illocutoires d'information, ce sont surtout, par rapport à l'acte directeur de l'intervention, la requête *b*, des actes interactifs de préparation et de justification. Deux observations sont à noter à ce propos:

1. les actes exerçant une fonction interactive semblent perdre leur force illocutoire initiative; contrairement à l'acte directeur, ils ne contraignent pas l'interlocuteur à prendre position;

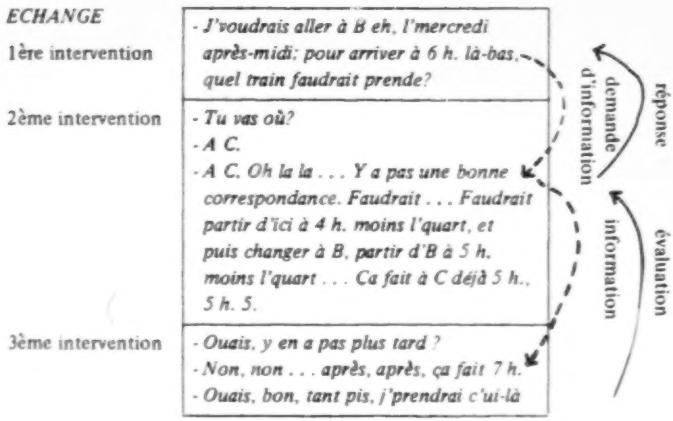
2. les fonctions interactives, contrairement aux fonctions illocutoires, ne sont pas paraphrasables par un verbe performatif, ce qui confirme la pertinence de la distinction.

Les fonctions interactives établissent une relation de subordination par rapport à l'acte directeur. On peut observer aussi des relations de coordination entre des actes (voire des interventions) de fonctions illocutoires ou entre des actes de fonctions interactives. Nous y reviendrons.

Ce modèle de structure de la conversation esquissé, essayons de l'appliquer à une conversation authentique entre un garçon et un employé à un guichet de gare:

G. *B'jour m'sieur. J'voudrais aller à B eh, l'mercredi après-midi; pour arriver à 6 h. là-bas, quel train faut-il prendre?*
E. *Tu vas où?*
G. *A C.*
E. *A C. Oh la la . . . Y a pas une bonne correspondance. Faudrait . . . Faudrait partir d'ici à 4 h. moins l'quart, et puis changer à B, partir d'B à 5 h. moins l'quart . . . Ça fait à C déjà 5 h., 5 h. 5.*
G. *Ouais, y en a pas plus tard?*
E. *Non, non . . . après, après, ça fait 7 h.*
G. *Ouais, bon, tant pis, j'prendrai ç'ui-là! Au r'voir!*

Si on laisse de côté les échanges confirmatifs tronqués de salutations réalisés par *B'jour M'sieur* et *Au r'voir!*, on distinque aisément un grand échange réparateur, constitué par trois interventions de demande d'information, de réponse et d'évaluation, selon le schéma suivant:



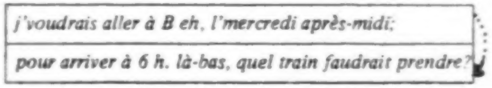
- J'voudrais aller à B eh, l'mercredi après-midi; pour arriver à 6 h. là-bas, quel train faudrait prende?

- Tu vas où?
- A C.
- A C. Oh la la . . . Y a pas une bonne correspondance. Faudrait . . . Faudrait partir d'ici à 4 h. moins l'quart, et puis changer à B, partir d'B à 5 h. moins l'quart . . . Ca fait à C déjà 5 h., 5 h. 5.

- Ouais, y en a pas plus tard ?
- Non, non . . . après, après, ça fait 7 h.
- Ouais, bon, tant pis, j'prendrai c'ui-là

Au niveau le plus élevé, celui de l'échange, la première intervention joue le rôle d'intervention directrice d'échange, avec une fonction illocutoire initiative, marquée par une flèche traitillée, de demande d'information. La deuxième intervention a à la fois une valeur illocutoire réactive, marquée par une flèche pleine, de réponse et une valeur illocutoire initiative d'information. La troisième a une valeur illocutoire d'évaluation, permettant de clore l'échange.

La première intervention est formée d'un acte illocutoire d'information, qui a une fonction interactive, marquée par une flèche pointillée, de préparation, et d'un acte directeur illocutoire de demande d'information, selon le schéma suivant:

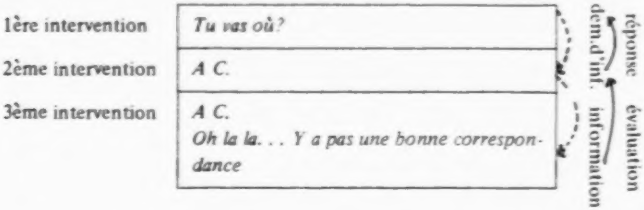


j'voudrais aller à B eh, l'mercredi après-midi;

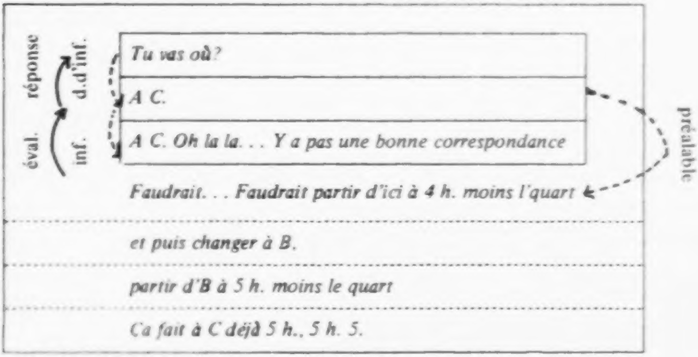
pour arriver à 6 h. là-bas, quel train faudrait prendre?

La structure de la deuxième intervention est plus complexe. On y repère une séquence d'actes directeurs d'information coordonnés, qui reprend le *faudrait* de la demande d'information: *Faudrait . . . Faudrait partir d'ici à 4 h. moins l'quart et puis changer à B, partir d'B à 5 h. moins l'quart . . .* et *Ça fait à C déjà 5 h., 5 h. 5.*

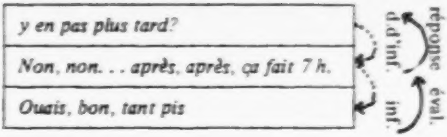
Quant à la première partie de l'intervention, celle qui précède l'acte directeur, elle présente manifestement la structure typique de l'échange réparateur, comme l'indique le schéma suivant :


1ère intervention
2ème intervention
3ème intervention
Tu vas où?
A C.
A C.
Oh la la. . . Y a pas une bonne correspondance
réponse
dem.d'inf.
évaluation
information

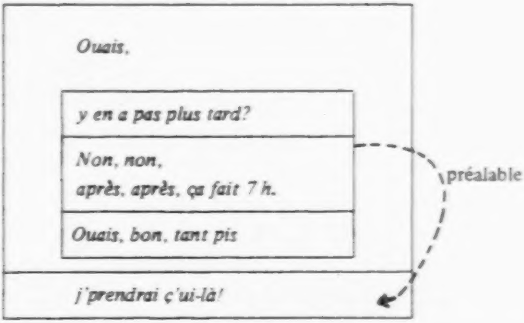
Il faut donc admettre qu'un échange peut être constituant d'une intervention, nous parlerons alors d'échange enchâssé, et que celui-ci remplit globalement, par rapport à l'acte directeur de l'intervention auquel il est subordonné, une fonction interactive, ici de préalable. Nous obtenons ainsi, pour la deuxième intervention, la structure suivante, où apparaissent toutes les fonctions illocutoires et interactives aux niveaux de l'intervention et de l'échange enchâssé (le traitillé sépare les actes coordonnés) :


réponse
éval.
d.d'inf.
inf.
Tu vas où?
A C.
A C. Oh la la. . . Y a pas une bonne correspondance
Faudrait. . . Faudrait partir d'ici à 4 h. moins l'quart
et puis changer à B.
partir d'B à 5 h. moins le quart
Ca fait à C déjà 5 h., 5 h. 5.
préalable

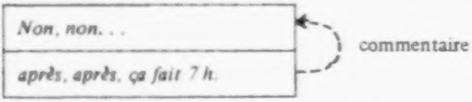
La troisième intervention présente aussi une structure complexe, avec un échange enchâssé de type réparateur, qu'on reconnaît aisément dans la séquence :


y en pas plus tard?
Non, non. . . après, après, ça fait 7 h.
Ouais, bon, tant pis
d.d'inf.
réponse
inf.
éval.

L'acte directeur de cette troisième intervention est certainement l'acte illocutoire d'information *j'prendrai ç'ui là!*. Par rapport à celui-ci l'échange enchâssé a globalement une fonction interactive de préalable quant au *Ouais*, il a une fonction illocutoire réactive de suspension de l'évaluation. On obtient ainsi la structure suivante:


Ouais,
y en a pas plus tard?
Non, non,
après, après, ça fait 7 h.
Ouais, bon, tant pis
j'prendrai ç'ui-là!
préalable

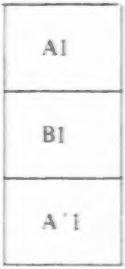
A noter que l'échange enchâssé dans l'intervention est constitué lui-même d'interventions; celles-ci peuvent se réduire chacune à un acte, comme c'est le cas pour la plupart d'entre elles dans les deux échanges enchâsses ci-dessus; elles peuvent naturellement être constituées de plusieurs actes, comme l'intervention de réponse:


Non, non. . .
après, après, ça fait 7 h.
commentaire

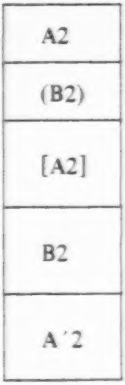
où l'acte directeur d'information *Non, non. . .* (= il n'y en a pas) est suivi d'un acte illocutoire d'information qui a une fonction interactive de commentaire.

La structure de base de l'échange peut subir des complications importantes non seulement parce qu'un échange, ainsi que nous l'avons vu dans l'exemple précédent, peut être enchâssé dans une intervention, mais surtout parce que certaines interventions de fonction illocutoire réactive ne constituent pas des clôtures satisfaisantes. C'est le cas en particulier quand l'intervention se limite à une simple prise en compte de la parole de l'autre (*Hmm!*, *ouais. . .*), quand elle marque un refus ou quand elle est interrompue. Ces types d'interventions, qui ne constituent pas des réactions satisfaisantes à l'intervention initiative, conduisent à une relance de l'échange par l'un ou par l'autre des protagonistes, généralement par le premier locuteur, jusqu'à ce que l'interlocuteur exécute une intervention réactive satisfaisante, susceptible de clore l'échange ou de conduire à la clôture de celui-ci.

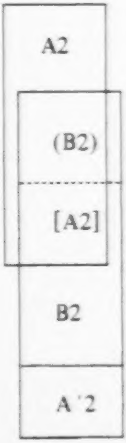
On observe ainsi, à côté de l'échange réparateur standard que nous représentons par le schéma suivant (où les lettres indiquent les interlocuteurs et le nombre l'échange) :



des échanges plus complexes. Ainsi, si l'intervention de B est une simple prise en compte du type *Hm!* ou *Ouais*, ne constituant pas une réaction pleinement satisfaisante à la première intervention de A, ce que nous indiquerons par des parenthèses, (B), on observe fréquemment un échange enchâssé de justification de la prise en compte partielle ou de demande de précision, qui conduit à une relance, indiquée entre crochets droits, [A], ou à une spécification, marquée entre barres obliques, /A/, de l'acte initial, suivie alors d'une réaction pleinement satisfaisante, qui aboutit à la troisième intervention clôturant l'échange. On obtient en première approximation le schéma suivant :



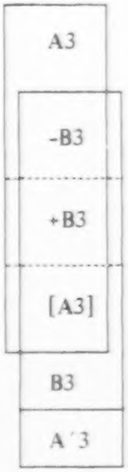
Mais cette structure plus complexe oblige à préciser la notion d'intervention. Nous considérons qu'une intervention constitutive d'échange, de fonction illocutoire initiative, n'est pas close tant qu'elle n'a pas été satisfaite par l'intervention suivante; l'intervention A2, non satisfaite par la simple prise en compte (B2), est relancée, ou se poursuit, dans [A2]. A l'inverse, l'intervention de fonction illocutoire réactive achevée (satisfaisant la précédente), ici B2, a déjà commencé par la simple prise en charge (B2). On observe ainsi que les deux interventions ne se succèdent pas simplement, en restant séparées, comme dans l'échange standard: elles sont enchevêtrées, ce que nous représenterons par le schéma suivant (ou la ligne traitillée sépare deux interventions partielles qui ne sont pas des frontières d'interventions achevées) :



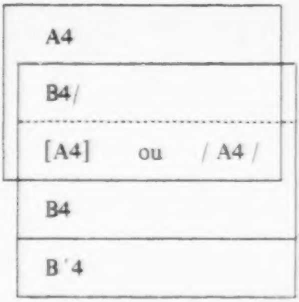
L'intervention d'un locuteur peut donc comprendre, non seulement des échanges subordonnés faisant intervenir les deux interlocuteurs, ainsi que nous l'avons vu dans la première conversation, mais aussi des fragments (simple prise en compte, intervention interrompue, objection) de l'intervention de l'interlocuteur.

La structure de l'échange se complique encore quand la deuxième intervention est un refus, une réfutation ou un rejet, ce que nous indiquerons par le signe -, -B; en effet, ce type de réaction ne conduit pas généralement à la clôture de l'échange. Le locuteur va tenter fréquemment de récuser l'objection qui lui est faite, récusation que nous noterons par un +, +A, et de relancer l'intervention initiale, [A], relance qui conduira peut-être cette fois à une acceptation, B, conduisant à la clôture de l'échange, A′.

On a le schéma:



Il arrive aussi fréquemment qu'une intervention soit interrompue par l'autre interlocuteur – ce que nous noterons par une barre oblique, B/–, qui relance ou spécifie immédiatement sa première intervention. Voir le schéma :



Ces quelques schémas de base, dont la liste est loin d'être exhaustive, peuvent naturellement se combiner de multiples manières et aboutir à des structures d'échange extrêmement complexes, comme le montrera l'analyse de la conversation authentique suivante, entre un libraire et un jeune client (nous notons dans la transcription les paroles qui sont prononcées simultanément par les deux interlocuteurs):

L. ***Monsieur bonjour***

C. ***Bonjour** Monsieur. Est-ce que vous avez CONTES ET NOUVELLES D'OSCAR WILDE?*

L. *OSCAR WILDE. . . En français ?*

C. ***Heu**. . . oui.*

L. ***Bon**. . .*

C. ***S'il vous plaît**!*

L. ***Dans quelle** collection?*

C. ***J'sais pas**. . . heu. . . c'que vous avez.*

L. ***Bon*** (il cherche au rayon). *Cher Monsieur, j'ai rien.*

C. *Vous avez rien ?*

L. *Non, j'ai rien. Faut que j'vous commande.*

C. ***Hmm, Ça va**. . . ?*

L. ***Alors**, ça doit exister en FOLIO.*

C. *En **FOLIO** !*

L. ***Sauf** erreur. J'vais d'ailleurs vérifier ça tout d'suite. WILDE, alors en FOLIO y a LE CRIME DE LORD ARTHUR SAVILE ET AUTRES CONTES. Voilà.*

C. *Voilà.*

L. *Oui, alors, ils ont pris simplement un titre – c'est traduit par LACK, ouais – ben voilà, c'est les contes de WILDE.*

C. *Par contre. . .*

L. ***En en** LIVRE DE POCHE, j'crois qu'il existe aussi un titre en POCHE tout court, POCHE CLASSIQUE, WILDE, LE PORTRAIT DE DORIAN GRAY, LA BALLADE DE LA GEOLE DE READING, L'ARTISTE EN PRISON, ouais ça c'est le, c'est les, les écrits heu de prison et LE PORTRAIT DE DORIAN GRAY, ça c'est, le petit roman, alors en fait c'est dans FOLIO que vous trouvez.*

C. *Hmm. . . Non, parce que c'est juste pour un conte, pis ch'sais pas s'il y est pas là d'dans heu. . .*

L. *Bien. S'il est pas là-d'dans, ben c'est pas grave, parce qu'moi j'peux l'avoir **heu j'le**. . .*

C. ***C'est vrai**.*

L. *garderai pour l'stock. Alors, vous r'passez mardi **heu, vous**. . .*

C. ***Ouais, ouais.***

L. *r'gardez ça, on r'garde ça ensemble, pis **si ça vous**. . .*

C. ***Parce que c'est**. . .*

L. *convient pas heu, c'est pas **grave du tout**.*

C. ***Y a juste un** conte que j'dois mettre en scene, **alors**. . .*

L. ***Ouais**, ouais, d'accord. Ben, on r'gardera ça ensemble, mardi après-midi, d'accord ?*

C. *Ouais, ouais, d'accord.*

L. *Parfait.*

C. ***Vous**. . .*

L. ***OK**, j'le commande ?*

C. ***Vous** réservez comme ça ?*

L. *Oui.*

C. *D'accord. Merci beaucoup.*

L. *Au r'voir Monsieur, merci.*

C. *Au r'voir Monsieur. Ça va, ça. . . environ m'faire, vers combien ?*

L. *Ça vous r'viedra, ou ça vous r'viedrait. . . oufsfe. . . quatre francs.*

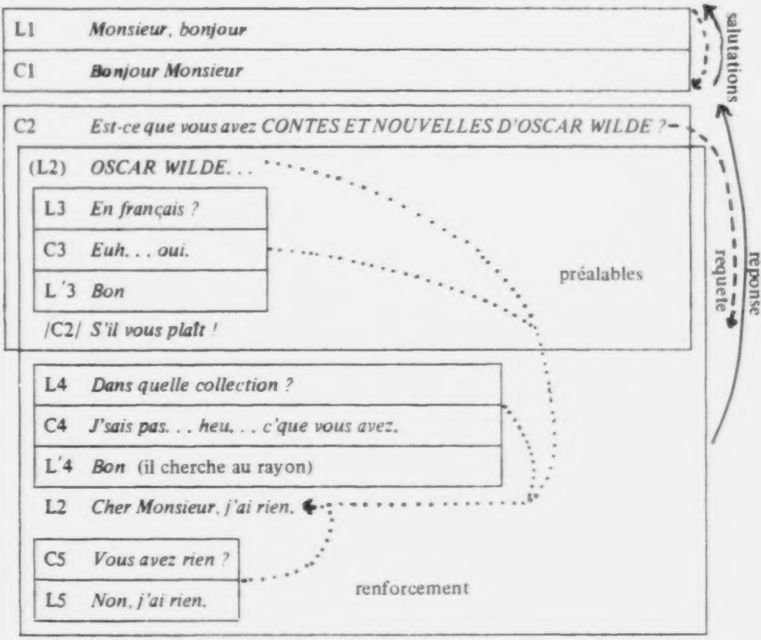
C. *Bon. D'accord alors. Merci.*

L. *Au r'voir.*

C. *Merci beaucoup.*

On peut distinguer dans cette conversation, outre les échanges de salutations du début et de la fin, deux grands échanges ayant pour thèmes l'achat, puis la commande d'un ouvrage, qui présentent une structure assez complexe. A la demande d'information / requête *Est-ce que vous avez. . . ?*, la prise en compte *OSCAR WILDE* n'apporte pas une réponse satisfaisante pouvant conduire à la clôture de l'échange; elle conduit à un échange enchâssé de complément d'information qui est subordonné interactivement à la réponse, et à une spécification par le client de l'acte initial à l'aide du marqueur indicatif *s'il vous plaît* (cf. Roulet 1980a). La réponse à cet acte de requête est elle-même précédée d'un deuxième échange subordonné, à fonction interactive de préalable, et suivie d'un autre échange subordonné, à fonction interactive de renforcement.

On obtient ainsi le schéma suivant, dans lequel nous utilisons tous les instruments présentés jusqu'ici, pour décrire la structure des deux premiers échanges de cette conversation :

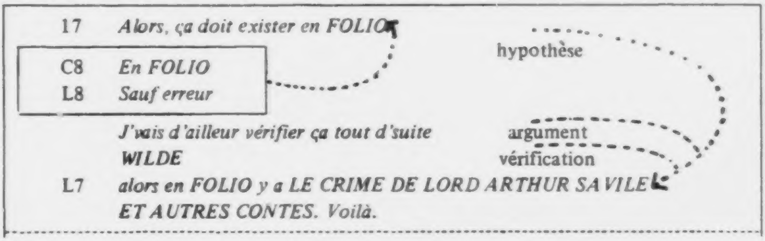


L1 *Monsieur, bonjour*
C1 *Bonjour Monsieur*
C2 *Est-ce que vous avez CONTES ET NOUVELLES D'OSCAR WILDE ?*
(L2) *OSCAR WILDE. . .*
L3 *En français ?*
C3 *Euh. . . oui.*
L'3 *Bon*
/C2/ *S'il vous plaît !*
L4 *Dans quelle collection ?*
C4 *J'sais pas. . . heu. . . c'que vous avez.*
L'4 *Bon* (il cherche au rayon)
L2 *Cher Monsieur, j'ai rien.*
C5 *Vous avez rien ?*
L5 *Non, j'ai rien.*

On retrouve aisément dans ce schéma les deux premières interventions caractéristiques de l'échange réparateur: C2 et L2 (mais enchevêtrées car elles incluent les interventions qui ne se suffisent pas à elles-mêmes (L2) et /C2/) et on peut repérer les différentes relations illocutoires initiatives et réactives entre les constituants des interventions. La troisième intervention caractéristique de l'échange réparateur, l'évaluation, n'apparaît pas, pour la raison sans doute que l'auteur de la deuxième intervention, ne pouvant satisfaire à la demande d'achat, enchaîne tout de suite en ouvrant un nouvel échange, d'offre de commande.

Ce troisième échange est particulièrement long: en effet, il comporte de nombreux échanges enchâssés et présente la plupart des types d'interventions partielles inventoriés précédemment; en outre, il inclut des interventions de nature argumentative constituées de plusieurs actes subordonnés interactivement à un acte directeur de conclusion: formulation d'hypothèse, d'arguments, opérations de vérification, etc., alors que les interventions des interactions examinées précédemment ne comportaient qu'un ou deux actes, accompagnés éventuellement d'échanges enchâssés. La première intervention du septième échange commence par la formulation d'une hypothèse marquée par la présence du *devoir* épistémique: *Alors, ça doit exister en FOLIO*; cet acte initial n'est pas l'acte directeur d'intervention, car la formulation de l'hypothèse est subordonnée interactivement à la conclusion: *alors en FOLIO y a. . . voilà.* De même, la présence du marqueur indicatif d'acte interactif *d'ailleurs* dans *J'vais d'ailleurs vérifier ça tout d'suite* montre nettement que cet énoncé introduit un argument, s'ajoutant à d'autres arguments implicites (cf. Ducrot & al. 1980), en faveur de la conclusion. Enfin, *WILDE* est la verbalisation d'une opération de vérification orientée vers la conclusion. Pour marquer la différence entre acte directeur et actes subordonnés dans une intervention, nous indiquerons l'acte (ou la séquence d'actes) subordonné(s) par une minuscule: 17, par opposition à L7.

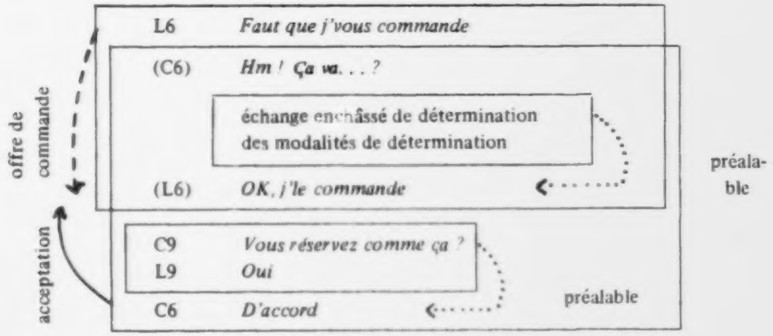
Si on tient compte en outre de la présence d'un échange enchâssé subordonné interactivement à la formulation de l'hypothèse, la structure interne de la première partie de l'intervention L7 se présente ainsi:



17 *Alors, ça doit exister en FOLIO*
C8 *En FOLIO*
L8 *Sauf erreur*
J'vais d'ailleur vérifier ça tout d'suite
WILDE
L7 *alors en FOLIO y a LE CRIME DE LORD ARTHUR SAVILE ET AUTRES CONTES. Voilà.*

On peut montrer aisément que la relance de l'intervention argumentative qui commence par *et en LIVRE DE POCHE* présente une structure analogue, mais nous ne développerons pas davantage ici l'étude de la structure interne de l'intervention.

Mais revenons à la structure globale de l'échange de commande. Il est ouvert par la constatation de la nécessité de commander l'ouvrage, qui est aussi implicitement une offre de commande: *Faut que j'vous commande.* Celle-ci n'est prise en compte que partiellement par le *Hm !* du client, sans doute parce qu'elle est insuffisamment précise. D'où la nécessité pour le libraire d'ouvrir un échange enchâssé de détermination des modalités de la commande, qui va de *Alors, ça doit exister en FOLIO* jusqu'à *Parfait.* L'entente ainsi réalisée sur les modalités de la commande permet de conclure à la nécessité de commander effektivement: *OK j'le commande*, qui relance la constatation /offre de commande initiale. Après un échange subordonné de demande de précision qui a une fonction interactive de préalable, l'acceptation du client clôt l'échange. On a la structure suivante:


offre de commande
L6 Faut que j'vous commande
(C6) Hm ! Ça va. . . ?
échange enchâssé de détermination
des modalités de détermination
(L6) OK, j'le commande
préalable
acceptation
C9 Vous réservez comme ça ?
L9 Oui
C6 D'accord
préalable

Mais examinons maintenant de manière plus détaillée la structure de l'échange enchâssé de détermination des modalités de la commande, qui illustre les différents types de prises en compte partielles et de relance inventoriés précédemment. Il s'ouvre par l'intervention du libraire, déjà analysée, aboutissant à la conclusion de commander tel volume de FOLIO. Cette conclusion n'est que partiellement prise en compte par le *Voilà* du client (sans doute parce que le titre ne correspond pas tout à fait à ce qu'il a demandé: *Les* Contes de WILDE). Cela contraint le libraire à relancer son intervention argumentative pour aboutir à la conclusion plus précise: *ben voilà, c'est LES CONTES DE WILDE*. Cette conclusion réitérée faisant l'objet d'une amorce d'objection: *Par contre . . .*, le libraire est contraint de relancer son intervention argumentative en envisageant d'autres hypothèses et vérifications, qui aboutissent à une réaffirmation de la conclusion, marquée par *alors en fait*.

Le client réagit cette fois par une prise en compte partielle *Hm...*, suivie d'un refus, accompagné d'un acte subordonné à fonction interactive de justification (marquée par *parce que*). Le client ne peut se satisfaire de l'ouvrage proposé, parce qu'il craint que le conte désiré n'y figure pas. Le libraire récuse cette objection en signalant la possibilité de vérifier la présence du conte recherché dans le recueil à la réception de l'ouvrage. Ne pouvant aboutir à une entente sur une des modalités de la commande: l'identification de l'ouvrage sur catalogue, il relance l'échange en en abordant une autre: la possibilité de vérification *de visu* au magasin: *Alors, vous r'passez mardi. . .* A cette proposition répond une répétition de l'objection: *Y a juste un conte. . .*, qui contraint le libraire à une répétition de sa prise en compte, suivie de la relance de l'offre de vérification *de visu*: *Ben, on r'gard'ra ça ensemble mardi après-midi, d'accord ?* Cette offre, dont le caractère pressant est marqué par *d'accord ?* est enfin acceptée, ce qui conduit à la clôture de ce très long échange enchâssé par l'évaluation: *Parfait*.

On obtient ainsi pour cet échange la structure de la page suivante:

offre de modalités de commande

acceptation des modalités

évaluation

information

17	*Alors, ça doit exister en FOLIO*
C8	*En FOLIO*
L8	*Sauf erreur*
	J'vais d'ailleurs vérifier ça tout d'suite
	WILDE
L7	*alors en FOLIO y a LE CRIME DE LORD ARTHUR ET AUTRES CONTES, voilà.*
(C7)	*Voilà.*
17	*Oui, alors ils ont pris simplement un titre*
	– c'est traduit par LACK, ouais –
(L7)	*Ben voilà, c'est les contes de WILDE*
-C7	*Par contre. . .*
17	*et en LIVRE DE POCHE*
	j'crois qu'il existe aussi un titre en POCHE tout court, POCHE CLASSIQUE WILDE, LE PORTRAIT DE DORIAN GRAY, LA BALLADE DE LA GEOLE DE READING, L'ARTISTE EN PRISON
	ouais, ça c'est le, c'est les, les écrits heu de prison
	et LE PORTRAIT DE DORIAN GRAY, ça c'est le petit
(L7)	*roman alors en fait c'est dans FOLIO que vous trouvez.*
-C7	*Hmm. . . Non*
	parce que c'est juste pour en conte
	pis j'sais pas s'il y est pas là-d'dans heu. . .
+L7	*Bien, s'il est pas là-d'dans, ben c'est pas grave*
	parce que moi j'peux l'avoir heu j'le
	C'est vrai
	garderai pour le stock
L7	*Alors vous r'passez mardi, heu vous. . .*
	Ouais, ouais
	r'gardez ça. On r'garde ça ensemble, pis si ça vous
	Parce que c'est
	convient pas heu, c'est pas grave du tout
(-C7)	*Y a juste un conte que j'dois mettre en scène alors*
(+L7)	*Ouais, ouais, d'accord*
(L7)	*Ben, on r'gard'ra ça ensemble mardi après-midi, d'accord ?*
C7	*Ouais, ouais, d'accord.*
L'7	*Parfait.*

Nous n'aborderons pas l'analyse de la dernière partie de la conversation, car elle ne présente pas de structures nouvelles, à part peut-être l'entrelacement intéressant des échanges confirmatifs de remerciements et de salutations.

Nous ne développerons pas non plus davantage l'étude de la structuration de la conversation en échanges et en interventions. Signalons simplement que celle-ci gagnerait à être précisée et affinée par une observation systématique de formes, nombreuses dans le dernier échange analysé, comme *alors*, *bien*, *voilà*, qui apparaissent régulièrement aux frontières des constituants analysés et fonctionnent sans doute comme *marqueurs de structuration de la conversation* (cf. Auchlin 1981).

De fait, la macroanalyse conduite jusqu'ici visait moins à élucider la structure de la conversation pour elle-même qu'à saisir le fonctionnement des actes de langage en cotexte. Nous y avons gagné principalement une resituation de la fonction illocutoire au niveau global de la séquence complexe d'actes subordonnés à un acte directeur qu'est l'intervention, une prise en considération de la fonction illocutoire réactive, généralement négligée par la force des choses dans l'étude d'actes isolés, et surtout la mise en évidence de relations interactives entre les actes constituants de l'intervention.

Nous aimerions, en conclusion, examiner de manière plus approfondie, dans les réalisations des actes du langage, les traces des processus de figuration. Nous avons choisi pour cela un fragment de conversation, extrait d'une émission de RADIOSCOPIE entre Jacques Chancel et Michèle Maurois, qui met en cause les faces des interlocuteurs de manière plus marquée que les transactions commerciales décrites précédemment. Dans ce fragment, J.C. part de l'idée qu'André Maurois, le père de M.M., n'a pas été aussi heureux dans sa vie privée que dans sa vie littéraire et il cherche à obtenir de M.M. des confirmations ou des révélations sur les difficultés, peut-être d'ordre sentimental, de cette vie privée. Une telle tentative empiète manifestement sur le territoire de son interlocutrice et porte atteinte à ce que Brown et Levinson (1978) appellent sa face négative. J.C. doit donc multiplier les processus de figuration dans la réalisation de ces interventions pour atteindre son objectif sans encourir de reproche, de refus ou de rebuffade. De son côté, M.M. ne peut avouer, révéler, sans porter atteinte à sa face positive, à l'image publique de la famille Maurois: d'où la nécessité pour elle aussi de multiplier les processus de figuration dans la réalisation de ses interventions.

Voici ce fragment :

M.M. (. . .) *Et alors en effet il n' l'a pas, il n' l'a pas, c'est . . . il ne se considérait pas comme un homme qui avait été parfaitement heureux*

J.C. *Non c'est vrai qu'on peut s'demander s'il s'est passé quelque chose dans sa vie parc' qu' il a été e bon enfant, bon élève e . . . bon écrivain, bon académicien euh bon mari, bon père, enfin hein ?*

M.M. *Oui, oui, avec e, avec tout . . .*

J.C. *On souhaiterait presque e . . . la chose qu'on n'sait pas c'est-à-dire la f . . . la faute qu'il a pu commettre un jour, non ?*

M.M. *De véritable*

J.C. *Vous n'la cherchez pas dans . . . dans . . . (rires)*

M.M. *De véritable faute je n'pense pas qu'il ait pu commettre parce que ce n'était pas dans . . . ce n'était pas possible.*

J.C. *Non mais je l'répète dans la vie de GIDE, dans la vie d'MAURIAC il*

M.M. *Ah oui oui*

J.C. *il y a des récits, il y a des aveux*

M.M. *oui*

J.C. *quand même*

M.M. *oui*

J.C. *qui sont mieux qu'troublants, tandis que chez lui non, on les on n'les voit pas dans les Mémoires*

M.M. *Je n'suis pas sûre qu'il ait été un . . . un mari parfait, ça je . . . je n'pense pas.*

J.C. *Je vous remercie, MICHELE MAUROIS e, maintenant je crois qu'on peut un peu mieux connaître l'un des aspects de son écriture en retrouvant LE CHAPITRE SUIVANT* (. . .)

On y repère aisément un échange allant de *c'est vrai qu'on peut se demander* à *Je vous remercie M.M.*, qui présente une structure différente des échanges observés jusqu'ici, puisque le locuteur interrompt constamment les interventions réactives de l'interlocutrice en relançant l'intervention initiale (sans doute pour exercer une pression sur M.M. et couper court à ses réponses dilatoires). On a ainsi le schéma général :

C2	demande de confirmation / révélation
M2/	réponse interrompue
(C2)	relance de la demande de confirmation/révélation
M2/	réponse interrompue
(C2) /	relance de la demande de confirmation/révélation
-M2	objection à une présupposition de la demande
+C2	récusation de l'objection
M2	aveu
C'2	évaluation

Mais examinons de plus près les processus de figuration à l'oeuvre dans la réalisation des actes menaçant la face de demande de révélation ou de confirmation, de dénégation et d'aveu.

Tout d'abord, J.C. ne réalise pas son premier acte de demande de révélation/confirmation sous la forme directe et explicite: *Je vous demande s'il s'est passé.* Sa formulation révèle de nombreux processus d'atténuation (ou *hedges*, pour reprendre les termes de Lakoff):

- suppression des références explicites aux deux interlocuteurs et, corollairement, substitution d'un acte cognitif à un acte exercitif: *on se demande* remplace *je vous demande ;*
- double modalisation par l'introduction de *pouvoir* et de *c'est vrai.*

L'acte est ainsi présenté d'abord comme une simple réflexion: seul le marqueur d'approbation discursive final *enfin hein ?* (cf. Settekorn 1977) appelle une confirmation/révélation de l'interlocutrice.

Même phénomène dans la relance: J.C. ne dit pas explicitement *Je vous prie instamment de me révéler la chose qu'on n'sait pas.* On observe les processus d'atténuation suivants :

- suppression des références explicites aux interlocuteurs;
- emploi d'un verbe modal, *souhaiter*, à la place d'un verbe performatif;
- surmodalisation par l'introduction du conditionnel et de *presque*;
- modalisation de la subordonnée *la faute qu'il a commise* à trois niveaux: introduction de *pouvoir*, montée de l'auxiliaire (passage de *il peut avoir commise* à *il a pu commettre*), et introduction de *un jour*;
- enfin, l'élément le plus menaçant pour la face positive de l'interlocutrice: l'existence d'une faute, est introduit de manière implicite sous la forme d'une présupposition existentielle.

L'acte est présenté comme la simple expression d'un sentiment, alors qu'il introduit le présupposé de l'existence d'une faute et véhicule en outre une demande très pressante, marquée tout à la fin par le *non ?*

On observe des processus d'atténuation analogues dans les interventions illocutoires réactives de l'interlocutrice. Tout d'abord, elle ne dit pas catégoriquement et explicitement *j'affirme qu'il n'a pas commis de faute*; on observe dans la formulation de la dénégation:

- l'emploi d'un verbe modal: *je pense qu'il n'a pas commis*, à la place du performatif;
- la montée de la négation: *je ne pense pas qu'il a commis*, dont la fonction est clairement atténuative (cf. Prince 1976);
- l'introduction modalisatrice du subjonctif: *qu'il ait commis* ;
- l'adjonction du modal *pouvoir*, avec montée de l'auxiliaire: *qu'il ait pu commettre* ;
- l'introduction de *véritable* et la suppression de l'article défini, pour réduire, voire récuser la présupposition existentielle.

Ces multiples atténuations peuvent surprendre dans la réalisation d'un acte de dénégation qui, pour être efficace, gagnerait à être le plus catégorique possible. Mais la dénégation, comme l'assertion, doit pouvoir s'appuyer sur une certitude du locuteur et, en cas de contestation, sur de sérieuses justifications. Or, l'interlocutrice ne peut être certaine (il ne s'agit pas de *sa* vie); en outre, elle semble réduite, face aux indices accumulés par son interlocuteur, à un argument très faible: *parce que c'n'était pas dans . . . c'n'était pas possible.* Dans une telle situation de faiblesse, une dénégation catégorique risque d'essuyer une sévère récusation, qui porterait une sérieuse atteinte à la face positive de l'auteur de la dénégation; mieux vaut énoncer une dénégation fortement atténuée et, conséquemment, moins vulnérable.

Les processus d'atténuation apparaissant dans l'aveu final sont plus faciles à comprendre, puisque l'aveu est le type même de l'acte menaçant la face positive du sujet parlant; en outre, il s'agit toujours de faits dont la locutrice ne peut être tout à fait sûre, puisqu'ils concernent l'existence d'un autre, même proche. Aussi M.M. ne dit pas explicitement *Je reconnais qu'il n'a pas été un bon mari* ; on observe

- l'emploi d'une expression modale (encore atténuée par la litote) à la place d'un verbe performatif: *Je n'suis pas sûre* ;
- l'introduction modalisatrice du subjonctif: *qu'il ait été* ;
- l'introduction d'un adjectif extrême: *parfait*, dans une phrase négative, qui joue un rôle atténuateur identique au *véritable* introduit dans la dénégation (personne n'ayant commis de *véritable* faute et n'ayant été un mari *parfait*, on ne s'engage guère en mettant en doute l'un et l'autre).

* * *

Nous avons voulu montrer, dans ce papier, combien l'étude des actes de langage gagnait à être restituée dans la problématique de l'interaction en face à face et de la structure de la conversation. On aboutit ainsi à une meilleure compréhension du jeu des fonctions illocutoires initiatives et réactives des interventions dans l'échange, à la mise en évidence des fonctions interactives des actes et des échanges subordonnés par rapport à l'acte directeur d'une intervention et, enfin, à la description des constituants des actes eux-mêmes qui, à côté des marqueurs d'actes (cf. Roulet 1980 a et b), jouent un rôle déterminant dans la régulation de l'interaction en face à face.*

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* Cette présentation s'inspire beaucoup des idées développées par les collaborateurs du projet de recherches de l'Unité de linguistique française de l'Université de Genève sur les actes de langage dans la conversation, en particulier par A. Auchlin, J. Moeschler et A. Zenone dans *Actes de langage et structure de la conversation*; mais les idées développées dans ce recueil ont été modifiées par l'introduction d'une conception de l'intervention et par une définition plus restrictive du concept d'interactivité qui n'engagent que l'auteur.

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Phatic, metalingual and metacommunicative functions in discourse: Gambits and Repairs

1. Introduction

Abstract. The need for realizing phatic, metalingual and metacommunicative functions is particularly strong in communicative situations where relevant linguistic knowledge is asymmetrically distributed, as is notably the case in interactions between native speakers and language learners. Theoretical frameworks for the linguistic phenomena which primarily serve those functions, viz. gambits and repairs, are presented, and their interrelationship is discussed. On the basis of these considerations and a small set of conversational data, hypotheses about repair work in interactions between native speakers and learners at different proficiency levels are formulated. It is finally argued that the discourse-analytical approach should be broadened to include a psycholinguistic dimension, which seems necessary if one aims at explaining communicative behaviour.

As a point of departure for this article, let us try to imagine what an interaction would be like between two idealized native speakers, Mr Noam and Mr Chomsky, adhering completely to the Gricean maxims of communication within a Habermasian universe of discourse: Both participants would have equal access to the linguistic code, although their knowledge of the world might differ (though not in any basic respects). The speaker would formulate himself in a way which at the same time would express his communicative intentions in a maximally economic way and enable his interlocutor unambiguously and with ease to reconstruct his intention. The 'messages' would be 'transmitted' between the participants without being distorted by any 'noise'. In this utopian situation, communication could develop in a straight line towards whatever illocutionary and propositional goals have been established by the participants.

Unfortunately, real-life communication is very different from this. One way of tackling this sad state of affairs is to transfer the distinction between a *langue* and a *parole* level to communication analysis and see the various communicative manifestations as somehow 'distorted' relative to models of communication based on the Holy Trinity of Chomsky, Grice and Habermas.

Another approach, the one we adopt in this paper, is to acknowledge that communication is very often **asymmetric** and continually creates problems of various sorts that have to be solved. Speakers may have wrong expectations about their interlocutors' linguistic knowledge or knowledge of the world. Speakers get misunderstood – or do not say exactly what they intended because of being excited or drunk or tired. Hearers do not know whether their reconstruction of the speaker's communicative intention is correct because they did not hear everything that was said or because they cannot relate what was said to the given context. In real-life communication, there is a constant need for speakers both to self-monitor their own speech production and to monitor the reaction of their interlocutors. There is a need for listeners to ensure that their interpretation of the speaker's communicative intention in fact matches what he wanted to say. And occasionally, there is a need for both speakers and listeners to solve problems as they crop up when finding ways of conveying communicative intentions or clarifying what turns out to be a misunderstanding or a lack of understanding. Language provides means for performing these various functions which are essential for verbal interaction, referred to as phatic, metalingual and metacommunicative. Before we go into a discussion of two specific examples of these, viz. gambits and repairs, let us indulge in some metalingual activity and clarify how we use these three terms.

In the Jakobsonian model of communicative functions (1960), a distinction is observed between the phatic and the metalingual function. Following Malinowski, Jakobson attributes a predominantly **phatic** function to a message if it serves 'to establish, to prolong, or to discontinue communication, to check whether the channel works (...), to attract the attention of the interlocutor or to confirm his continued attention' (1960:355). The **metalingual** function operates 'whenever the addresser and/or the addressee need to check up whether they use the same code' (356). The latter definition needs clarification on two points: (1) In Jakobson's terms, the metalingual function is interactionally defined: it is in focus in the case of shared communication problems due to differences in the availability of the code used. While this is no doubt an important aspect, it does not seem to be the only way in which metalingual activity is performed: it can also address itself to code problems the speaker experiences in formulating himself, manifesting itself in the correction of speech errors, the substitution of a chosen lexical item by another one which the speaker feels is more appropriate in terms of his intended meaning, and so forth. The metalingual function should therefore be understood to include code-directed activity which may be either interactional or speaker-oriented. (2) The metalingual function is related to, but should not be confused with what Watzlawick/Beavin/Jackson (1967) refer to as the **metacommunicative** function. This function indicates how the referential meaning of a message is to be interpreted. According to these authors, it is identical with the relational aspect of communication (1967). The difference between the metalingual and the metacommunicative function is that in the first case, the verbal activity is directed towards formal and semantic aspects of the code, e.g. 'I've knowed known her for years',' what does "obfuscate" mean'. In the second case, on the other hand, the verbal activity addresses itself to the illocutionary dimension, i.e. to the pragmatic level: it indicates what the speaker means by what he is saying ('I'm only joking', 'this is an order'), or how the hearer interprets what the speaker has said ('is this a reproach or what?'). In other words, the metalingual function operates when the focus is on the 'objective' properties of the code, whereas the metacommunicative function relates to the speaker's subjective intentions or the hearer's subjective interpretation thereof when using the code. Although there will be cases of overlap between the metalingual and the metacommunicative function, a distinction along the lines suggested seems both theoretically and empirically feasible.

Most types of verbal activities contain the phatic, the metalingual and the metacommunicative function **implicitly**: in responding to his interlocutor's preceding move in a cohesive and coherent manner, a speaker performs the phatic function in 'keeping the channel open', i.e. he maintains and futhers the discourse. In choosing acceptable and appropriate linguistic means, the speaker – most frequently without being aware of doing so – observes metalingual aspects. In using illocutionary force indicating devices (e.g. modal particles), a speaker informs his hearer about the illocutionary act he intends to perform by uttering the locution. In this paper, however, we shall concentrate on verbal activity whose **exclusive** or **predominant** function is phatic, metalingual or metacommunicative (cf. also the distinction proposed by Heritage 1981 between 'embedded' and 'exposed' 'displays of understanding').

2. *Gambits*

The class of linguistic phenomena which have an exclusively or predominantly **phatic** function has been referred to as **gambits,** among others by Edmondson (1977), House (1980), Edmondson/House (1981), and Faerch/Kasper (in press). In the present discussion we shall use the conceptual framework established in our previous article.

The primary function of gambits is to maintain and regulate discourse. By **maintaining discourse** is meant the establishment of coherence either between turns of speech or within turns of speech. By **regulating discourse** is meant the distribution of turns at speech among the discourse participants in terms of uptaking, turntaking, turnkeeping, turngiving, and the marking of discourse boundaries. These discourse-regulating functions will be further specified below, and the types of gambits by means of which they can be performed will be detailed (cf. Edmondson 1977, Edmondson/House 1981).

Uptaking is performed by a present hearer in order to signal to the present speaker that the channel is still open and that the speaker's message is being taken in. It indicates furthermore that the present hearer makes no claim on getting the floor but reinforces the current distribution of discourse roles between the participants. The types of gambits by means of which uptaking can be realized are (1) the receipt, (2) the go-on, (3) the exclaim. In using them, the hearer establishes coherence with the speaker's ongoing speech activity.

(1) The receipt is the most neutral signal a hearer can use in order to indicate that he is following the present speaker's contribution. It can either have the function of an attention signal (*mm, uhu*), or it can express understanding of (*I see (what you mean)*) or even agreement to the interlocutor's speech act (*you're right, that's true*). The first two functions are sometimes realized by a re-present, i.e. an utterance by means of which the speaker repeats to himself a part or the whole of what has just been communicated to him (S: 'We're going to Poona for a holiday next month'. – H: 'Poona oh yeah').

(2) The **go-on** is a special case of a receipt whereby the present hearer signals to the present speaker that he is listening and that he wants the speaker to keep his turn (*yes, mm*).

(3) The **exclaim** is a special case of a receipt which is marked for an expressive function, thereby indicating its user's emotive reaction to (a part of) his interlocutor's utterance. Although the exclaim does not differ from a receipt in terms of its discourse functions, it seems desirable to distinguish between these two gambits as they are realized by different classes of tokens, viz. either by a receipt carrying an emphatic marker (*oh, no*), or by elements which function regularly as 'interjections' (*good grief, what*).

Turntaking takes place when the current distribution of discourse roles is reversed in that a former hearer takes over the speaking role and a former speaker assumes a hearer's part. A former hearer can signal his intention of taking a turn by means of the following gambits:

The **starter** functions as a preliminary to a following utterance, indicating that its user is going to say something (*well, er, em*). It is unique as a gambit type in that it ties up neither with the interlocutor's nor with the present speaker's speech activity, i.e. it has no coherence function. By contrast, other turntaking gambits establish coherence between the present and the former speaker's contribution. These are the **receipt** and the **exclaim** (see above), which can also be used in a turntaking function. Moreover, **conjunctions** can be employed as turntakers, due to the fact that they normally occur clause-initially (*but, and, or*). As their primary function, however, is that of creating cohesion in texts by expressing how what follows the conjunction relates to what precedes, its discourse-regulating function as a turntaker is of secondary status.

Turnkeeping is an attempt by the present speaker to keep the floor, which becomes particularly relevant at a possible completion point in the speaker's turn. It can be performed by (1) an underscorer, (2) an aside, (3) a cajoler, (4) a hesitator, or by a conjunction.

(1) An **underscorer** serves to focus the interlocutor's attention to a point being made by the present speaker ('the point/thing is').

(2) An **aside** functions to inform the interlocutor about what the present speaker is doing while he is **not** addressing himself to the present hearer

(S1. 'can I see you about those references tomorrow' / S2: 'tomorrow... **let me see**... I've got appointments all morning...how about 2 o'clock').

(3, 4) Similar to conjunctions, cajolers and hesitators do not function as gambits primarily: the basic function of the **cajoler** is interpersonal in that it 'serves to establish, increase, or indeed restore harmony between the two conversational partners' (Edmondson/House 1981: 75) (*you know, you see, I mean, actually*). **Hesitators** are first and foremost devices used by a speaker in order to gain time for planning his speech, and may be interpreted by the hearer as problem-indicators (*er, erm*). When used at a possible completion point, they can however fulfill a turnkeeping function.

Turngiving is performed when the present speaker signals to the present hearer that he has finished his turn and wants the hearer to take the floor. The gambit which operates as a turngiver is the **appealer**: it elicits a response from the hearer to what the speaker has just said (tag question, *uh, okay*). However, appealers have a turngiving function only in turn-final position. When used turn-internally, their function is to elicit an uptaker from the present hearer while the present speaker keeps his turn.

Marking signals boundaries in discourse, e.g. between the opening and core phase, between the core and the closing phase, and between different discourse topics. This function is carried out by the marker, which either indicates the completion of an ongoing discourse topic or phase (*okay, good*), or the opening of a next discourse topic or phase (*well now, by the way*).

It should be mentioned that the use of gambits is often accompanied by discourse-regulating signals at the nonverbal level, which can also replace the verbal signals completely. In his analysis of dyadic face-to-face interactions, Duncan (1974) observed, for instance, that 'head nod' as a nonverbal uptaker ('auditor back channel signal') occurred with almost identical frequency as the most frequent verbal uptaker, the 'u-hum signal'.

Of the discourse-regulating functions introduced above, we shall now discuss uptaking in some more detail. In so doing, we hope to identify some aspects of the relationship between the phatic function on the one hand and the metalingual and metacommunicative function on the other hand.

Within uptaking, various subfunctions can be distinguished, which can be glossed as follows:

(a) 'I'm listening': indication of the hearer's attention to the speaker's verbal activity
(b) 'I can hear what you're saying': indication of the speaker's verbal activity being physically accessible to the nearer (*mm, uhu*)
(c) 'I understand what you're saying': indication of the present hearer's assigning meaning to the speaker's utterance (*mm, uhu, I see, yeah*)
(d) 'I agree to what you're saying': indication of agreement with the present speaker's message (*that's right, sure*)
(e) 'I react with surprise/doubt/anger... to what you're saying': indication of the hearer's emotive reaction to the speaker's message (*really, oh no, how splendid*).

Whereas the subfunctions (c), (d) and (e) can easily be identified in many types of verbal interaction, (a) and (b) seem to be theoretical possibilities rather than empirically observable distinctions. However, attention signals which indicate nothing but the hearer's readiness to 'tune in' to his interlocutor (a) are used in telephone conversations when there is noise in the channel ('hello' indicating 'I'm (here and) listening but I can't hear you'), as a response to a summons in the first exchange of an encounter (S1: 'Excuse me professor Flabberwacker' – S2: 'yes'), or in fact as an initiating opening move in service or counselling encounters where the mere entering of a customer/client into the setting calls for signalling availability to talk by the participant whose service is requested ('yes'). Function (b) is in focus when a learner acknowledges the speaker's verbal activity without however receiving the message – this can either be due to the learner's inattentiveness ('sorry I wasn't listening – what are you saying?'), or to his inability to assign meaning to the speaker's utterance ('I heard what you said but I didn't understand it'). In both cases, the learner might use uptaking signals which from his point of view relate to his reception of a stretch of sounds uttered by the speaker only, whereas the speaker might mistakenly interpret them as signalling understanding. If we then assume that the suggested distinctions can manifest themselves under certain conditions, we can characterize their relationships as follows:

By expressing functions (a) and (b), the hearer topicalizes the psychological and physical preconditions for understanding, without however signalling understanding itself. Functions (d) and (e), on the other hand, while implying understanding, are concerned with the hearer's cognitive or emotive attitude towards the speaker's message. Only function (c) has to do with the present hearer's comprehension, which we paraphrased as 'assigning meaning to the speaker's utterance'. It presupposes that the speaker uses a code which is receptively available to the hearer. According to our definitions proposed above, signalling understanding as a subfunction of uptaking can therefore be characterized as having both a phatic and a metalingual function.

In terms of the interpersonal relationship holding between discourse participants, uptaking can be characterized as being in accordance with the interactional principle of face-saving (see Goffman 1967, Brown/Levinson 1978): by actively supporting the present speaker's contributions, the hearer at the same time conveys the acceptance of the speaker as a co-participant whose social needs are respected (cf Edmondson/House 1981: 74).

Signalling understanding is fundamental to all conversation. Its primary function is to ensure the speaker that he can proceed without having to clarify or correct what he said. Closely related to this function is the signalling of non-understanding, which is typically expressed in two ways: **indirectly** by lack of uptaking or 'a hearer's silence', **directly** by means of an uptaking gambit in co-occurrence with paralinguistic signals like rising or level intonation and various extra-linguistic indications, which in the last resort determine whether the uptaker signals understanding or the opposite. As the signalling of non-understanding will normally force the speaker to initiate a repair-sequence (see below)[1], we here get into the borderline area between gambits and repairs, to be further explored later in the article.

3 *Repair work*

Repair as the verbal activity whose predominant function is metalingual or metacommunicative (cf the discussion above) has been of central interest in ethnomethodological research. Schegloff/Jefferson/Sacks (1977) established a framework for the analysis of repair which we shall take as a starting-point for our discussion of this phenomenon.

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[1] This relationship between uptaking gambits and repairs has been implicitly suggested by Duncan (1974), who subsumes 'request for clarification' under his five types of 'auditor back-channel signals', and has been explicitly pointed out by Edmondson/House 1981:62f., 73, 216.

Unfortunately Schegloff/Jefferson/Sacks do not offer a definition of repair. However, they do emphasize that the notion is to be understood as including, though not as identical with, corrections (1977: 363). Furthermore, according to their conceptual framework, a repair is not necessarily a replacement of one item by another – which means that 'word-searches' are included under repairs. Consequently, the 'trouble source' (or the 'repairable') need not show in the performance, although this is the case in most of the examples discussed in the article: the trouble source is an utterance or a part thereof which is experienced as problematic by at least one of the participants: the speaker might feel there to be a mismatch between what he said and what he intended to say, and the hearer might not be able to assign meaning to (a part of) the speaker's utterance, or he might be in doubt about the meaning he assigned to it. The metalingual and metacommunicative activity addressed to removing the trouble source is referred to as repair work.

In analysing how participants perform repairs structurally, Schegloff/Jefferson/Sacks specify four related repair patterns, which can be distinguished according to three criteria: (a) who is responsible for the repairable, (b) who initiates the repair, (c) who carries out the repair.

According to these criteria, repairs can have the following structure:

(1) Self-initiated self-(completed) repair: the participant responsible for the trouble source initiates and completes the repair himself ('She wants to study archeology – anthropology')

(2) Other-initiated self-(completed) repair: the recipient identifies a trouble source and initiates a repair which is carried out by the participant responsible for the trouble source (S1: 'She wants to study archeology.' – S2: 'archeology'. – S1: 'nonsense anthropology')

(3) Self-initiated other-(completed) repair: the participant responsible for the trouble source initiates a repair which is carried out by the recipient (S1: 'Sche wants to study archeology – or was it anthropology' – S2: 'anthropology I think')

(4) Other-initiated other-(completed) repair: the recipient identifies a trouble source and repairs on it (S1: 'She wants to study archeology' – S2: 'anthropology you mean').

Schegloff/Jefferson/Sacks observe that interactants do not choose either of these repair patterns arbitrarily but prefer self-initiated to other-initiated repair and self-completed to other-completed repair, which means that there is a strong preference for self-initiated, other-completed repairs. At a descriptive linguistic level, this reflects the structural aspects of discourse in that the occasion for self-repair occurs before the occasion for other-repair. At a socio-psychological level, Schegloff/Jefferson/Sacks offer no explanation for the preference for self-repairs over other-repairs, except that they observe that other-repairs tend to be treated by the speaker as disagreement, and that other-'correction' seems to serve an important function in the socialization process 'for dealing with those who are still learning or being taught to operate with a system which requires, for its routine operation, that they be adequate self-monitors and self-correctors as a condition for competence' (1977: 381). It seems fairly obvious that the preference for self-repair reflects the principle of face-saving (see above): an unsuccessful utterance may well be experienced as face-threatening by its producer, where self-repair then allows for restoring face. The identification and removal of a trouble source by the co-participant, on the other hand, will cast doubt on the trouble source producer's abilities as a communicator to a more serious extent as the trouble source becomes 'public' and a case for interactional treatment.

There are a number of points that need clarification in connection with the Schegloff/Jefferson/Sacks description of repairs – especially so when applying it to highly asymmetric types of interaction like conversations between learners and native speakers. In the following, we address ourselves to four areas:

(a) the nature of the trouble source, i.e. the relationship between repairs and 'corrections' and the question of 'replacement'

(b) the relationship between the different types of repair sequences and uptaking

(c) the relationship between self-initiated self-completed and self-initiated other-completed repairs

CORRECTION

The sentence on p. 80 beginning on line 4 should read:

Schegloff/Jefferson/Sacks observe that interactants do not choose either of these repair patterns arbitrarily but prefer self-initiated to other-initiated repair and self-completed to other-completed repair, which means that there is a strong preference for self-initiated, self-completed repairs at the expense of other-initiated, other-completed repairs. At a descriptive linguistic level, this -----

(d) the completion of repairs, in particular the question of follow-up moves subsequent to the repair sequence.

(a) Repair, replacement and communication strategy

As we mentioned above, Schegloff/Jefferson/Sacks include in their notion of repair cases in which the trouble source is not represented in the performance, i.e. 'replacement' is no prerequisite for repairs. This brings repairs close to 'communication strategies' if the latter are understood broadly as attempts to solve problems in communication. Neither Schwartz (1980) nor Gaskill (1980) observes any distinction between repairs and communication strategies in their respective studies of repairs in interlanguage communication, whereas Tarone (1980) explicitly argues that there is an **overlap** between communication strategies and repairs in the area of repairs designed 'to better transmit intended meaning', but that repairs of **formal** aspects of language fall outside the area of communication strategies. We agree with Tarone that repairs and communication strategies are best treated as different classes of phenomena with some overlap between them, but the criterion we would adopt in order to distinguish between the two categories differs significantly from Tarone's criterion ('form' versus 'meaning').

We consider **repair sequences** part of discourse analysis, necessary in order to describe and explain specific structural properties of conversational data. Repair sequences are initiated by the production of what turns out to be a trouble source, i.e. in opposition to Schegloff/Jefferson/Sacks we would restrict repair work to 'corrections' (**replacements** of a with b). If the speaker experiences a problem in finding the right word and hesitates before coming up with an attempt, this does not in itself constitute a repair sequence in our sense of the term as it does not have any **structural** implications for the discourse.

Communication strategies, on the other hand, are part of a cognitive-interactional description of communication. Communication strategies presuppose conscious awareness of a problem in speech production or reception, and they refer to the participant's various attempts to come to grips with these problems, either on a cooperative or a non-cooperative basis (see further the discussion in Færch/Kasper 1980). As we have shown elsewhere (Færch/

Kasper forthcoming a), communication strategies may be **covert**, i.e. the problem experiencer need not reveal by any 'signals of uncertainty' (ibid.) that he is experiencing a problem. **Overt** communication strategies occur when the problem manifests itself in performance (e.g. as a pause or as a turn-keeping gambit). Whether communication strategies are to be classified as repairs or not at the **discourse** level of description depends exclusively on whether they are solutions to trouble sources expressed directly in the discourse. Thus in the case of 'I found my-er-screwdriver in the basement', 'screwdriver' is the result of a communication strategy though not an instance of a self-repair. Whereas the same word would be a self-repair (in addition to functioning as a communication strategy) in the sentence 'I found my-er-what do you call it – for putting screws into the wall – screwdriver'.

What are the advantages of restricting repairs to replacement? One considerable advantage is that in so doing we avoid the potential vacuousness of saying that speakers experience trouble sources whenever they have to monitor whether their interlocutor will be able to understand a specific structure or part hereof. Predicting the communicative effect of language use and adjusting one's performance accordingly is not an exceptional phenomenon, relevant in connection with foreigner talk only: it occurs in all interactions, though obviously to various degrees. All language use is interactional in this sense, and one gains no insight into specific aspects of communication by advocating this principle[2].

(b) Repair and uptaking

In conversation, speakers constantly monitor their own speech production. They compare the speech segments they produce with their cognitive plans, and they follow the reactions of their interlocutor(s). We refer to the first-mentioned type of monitoring as 'self-monitoring' and to the last-mentioned type as 'other-monitoring'.

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[2] For the same reason, we do not find Schwartz' observation that self-repairs are instances of 'negotiated interaction' (1980: 141) nor Tarone's insisting on all communication strategies being interactional (1980) very revealing. They are either highly problematic, given any limited definition of 'interactional' (e.g. in discourse terms), or trivial.

Self-monitoring is the mechanism for detecting slips and errors, to be self-corrected. There is an obvious and close link between self-monitoring as it occurs in all types of conversation and monitoring in Krashen's sense (see e.g. Krashen 1981). Other-monitoring may reveal lack of understanding on the part of the hearer(s) and cause the speaker to repair his utterance or part of it. If the hearer's lack of understanding is not signalled explicitly by a repair request (leading to an other-initiated repair sequence), we have to do with a situation which is difficult to fit into the model established by Schegloff/Jefferson/Sacks: self-initiation of repairs as a result of other-monitoring. We differentiate between two types of self-initiated repair sequences: self-initiated repair as a result of self-monitoring, and self-initiated repair as a result of other-monitoring.

By introducing the notion of other-monitoring and relating it to self-initiation of repair we can add another piece to our explanation of the observable preference for self-correction: there are *two* systems available to the hearer in order to bring about a repair sequence. *During* a turn at speech, the hearer can bring about a repair sequence by changing his uptaking patterns, or by withholding an uptaking gambit, by stopping his head nods, or by means of gaze combined with a frown. This system comes out of operation at turn-taking (although it often functions past the turn-completion point, cf the observation in Schegloff/Jefferson/Sacks that a pause at the turn-taking point often results in a self-initiated repair). The first system then gives way to the system described by Schegloff/Jefferson/Sacks, according to which the hearer has to request a repair explicitly in order to initiate a repair sequence. Although we cannot support this empirically we believe that many apparently self-initiated repairs are in *effect* triggered off by hearer's lack of uptaking.

The importance of the uptaking function for interaction is borne out by the fact that one of the main functions of appeals (see above) is to elicit uptaking ('can you hear me?', 'do you understand?' or simply a tag-question). Speakers therefore have two possibilities for dealing with lack of uptaking: (1) interpret it as an indirect signal that self-repair is needed; (2) appeal for uptaking. It would be interesting to know what governs the speaker's selection of one of these rather than the other as a reaction to lack of uptaking. Unfortunately, we have nothing to offer on this question.

(c) Self-initiated self-completed or self-initiated other-completed repairs

According to Schegloff/Jefferson/Sacks, most self-initiated repairs yield self-completion (1977: 369, 377). It is very difficult from the article to obtain an impression of the occurrence of self-initiated other-completed repairs, as this type of repair sequence only gets mentioned as a structural possibility but is not discussed.

Self-initiation of repairs is typically accompanied by various 'non-lexical perturbations, e.g. cut offs, sound stretches, *uh*'s, to signal the possibility of repair-initiation immediately following' (Schegloff/Jefferson/Sacks 1977: 367). If the hearer interprets such signals as 'markers of uncertainty' and, following the cooperative principle of conversation, offers a repair suggestion, the resultant repair sequence is of the type self-initiated other-completed repair. At a descriptive structural level, this is no different from cases in which the speaker explicitly appeals to the hearer for a repair (verbally and/or paralinguistically) (S1. 'I talked to this Mr Cris-er – what's his name' (looks at S2) – S2: 'Christensen you mean'), but there may be significant differences both with respect to intentionality (on the part of the speaker) and with respect to how obliged the hearer feels to offer a repair.

By marking the need for a repair by means of a nonexiplicit appeal (hesitation, gambit or the like), the speaker leaves it open whether he can complete the repair himself or whether his signalling the initiation of repair is an (intentional) indirect appeal. This type of self-initiation may serve a defensive face-saving function (Goffman 1967): if you help me out, fine, but I can manage myself!

As seem from the hearer's point of view, repairing is optional following a non-appealing repair initiator but obligatory following a direct appeal or, put differently, the conditional relevance of an explicitly appealing repair initiator is stronger than the conditional relevance of other repair initiators. This gives us the following possibilities for repair completion following a self-initiation.

(a) - self-initiator ——> self-completion

(b) [+ self-initiator
- appeal]

(c) + appeal ——> other-completion

It would be interesting to investigate to what extent speakers' preferences for (a), (b) and (c) depend on questions of face-saving and to what extent they depend on the nature of the trouble source (see further the related discussion in connection with communication strategies in Færch/Kasper forthcoming a).

(d) Follow-up moves following repair completion

In his analysis of repair work, Rehbein (1978) points out that in everyday conversation, repair sequences are normally finalized by the 'self': in the case of other-completed repairs, the self confirms the repair by performing a follow-up move. Examples of this can be found in Schegloff/Jefferson/Sacks (1977: 365):

A: half the group that we had la:s' term wz there en we jus' playing arou:nd.
B: Uh – fooling around.
A: Eh – yeah...

From a discourse point of view, this means that the participant who is responsible for the trouble source keeps his turn at speech, even in cases of other-repair. Repair sequences are hence structurally organized in such a way that they typically establish loops in the discourse structure without interfering with the turn-taking system.

Rehbein makes the interesting observation that in communication in the foreign language classroom, the general pattern for repair work is upset in the way that it is typically the teacher who finalizes all repair sequences. When a pupil, after having produced a trouble source, self-repairs, this is followed by a follow-up move by the teacher, confirming (or rejecting) the repair. To this should be added that teachers sometimes encourage their pupils to repeat a teacher-repair, in which case the follow-up move has a direct teaching function.

With Rehbein's description of repair work in classroom communication we approach the topic we would like to consider in the second part of this article: uptaking and repair work in a specific type of asymmetric communicative situations, viz. interactions between L2 learners and native speakers.

4. Uptaking and repair-work in interlanguage communication

4.1. Previous studies

While a few studies have been conducted into L2 learners' use of repairs in face-to-face interaction, to be discussed below, we know of only one systematic investigation into the use of uptakers (and other gambits) and their relationship to repairs in learner-native speaker interaction. In her study of German learners of English conversing with English native speakers, Kasper (1981) found that verbal uptakers were used strikingly more frequently by the learners than by the native speakers, and that furthermore the native speakers, in conversing with learners, used uptakers far more often than when interacting with other native speakers. This was interpreted as being due to an increased need for signalling understanding in case of unequal access to the code. Other-initiations of self-repairs occurred considerably more often in the performance of both participants in the learner-native speaker interactions than in the native speaker interactions. However, the learners quite often did not initiate a repair although they evidently had not understood the native speaker's utterance. Again, this can be interpreted in terms of the principle of face-saving: whereas showing that one has understood one's interlocutor's contribution is in line with the notion of face, admitting non-understanding (in particular when felt as being due to one's ignorance) is not, and is therefore likely to be avoided, especially by more advanced learners like the subjects in Kasper's study.

Repairs in learner-native speaker and learner-learner interaction have been analyzed in two studies, Schwartz (1980) and Gaskill (1980). Working with video-recordings of interaction in pairs between learners of English, Schwartz found the same preference for self-repair as described in Schegloff/Jefferson/Sacks. Other-repair was restricted and tended to occur when the speaker made a lexical, syntactic or phonological error. Schwartz interprets this as an indication of the interaction being asymmetric with respect to linguistic competence. In his study of other repairs in learner-native speaker interactions, Gaskill found a similar occurrence of other-repair in connection with formal correction, although this seemed to be a characteristic feature of those native speakers only who were experienced ESL instructors. The following example is quoted by Gaskill:

Hassan: I uh I like Vestern movie (0.2)...
Lew : Western movies uhu.

Gaskill points out the double function of other-repairs like this in the form of restatements: the hearer expresses understanding of the speaker's turn (cf the mentioning of re-presents as uptaking/turntaking gambits above) and at the same time performs a corrective act. Gaskill includes word-searches in his analysis of repairs (cf the discussion of repairs versus communication strategies above, section 3a), and reports that word-searches frequently result in other-repair, which he accounts for by suggesting that 'the search constitutes a kind of correction-invitation format' (136).

The two studies confirm the finding of a preference for self-repair even in interactions between learner-native speaker and learner-learner. But the skewing towards self-repair may be less clear in such situations as error correction and cooperatively enacted problem-solving may result in more other-correction than is the case in more symmetric interactions.

4.2. Hypotheses about repair patterns in learner-native speaker discourse

4.2.0. Empirical basis and procedure

In the studies reported on above, no attempts were made at distinguishing between repair behaviour of learners at different proficiency levels and possible variation in native speakers' repair preferences when conversing with more or less proficient learners. An investigation of such repair patterns can contribute to our understanding of the conditions, forms and efficiency of learner-native speaker communication.

In order to tackle the problem of repair behaviour as dependent on learners' proficiency level, we adopted a procedure which can be characterized as deductive-inductive hypothesis formation: predictions were established on the basis of theoretical considerations and an analysis of a small data set. As a theoretical framework, the four repair structures set up by Schegloff/Jefferson/Sacks (1977) are used (see above). However, because of the asymmetric distribution of linguistic knowledge, it has been necessary to observe a distinction between the self = the learner and the self = the native speaker. The result of this is that there are not four but eight types of repair sequences to be considered. The data basis consists of six conversations between the same native speaker of English and six Danish learners of three different proficiency levels: two grade 6 pupils, representing the beginners' level; two grade 10 pupils from different streams ('folkeskole' and 'gymnasium'), representing the intermediate level; one student from a college of education and one university student of English, representing the advanced level (see Færch 1979 for a description of the comprehensive data collection from which these conversations were selected).

4.2.1. Learner self-initiated self-repair

There should be a strong need for self-repair on the part of **beginning learners,** which will however be difficult to realize precisely because of their lack of proficiency. This conflict manifests itself in the data in there being very little self-repair at this level. The few instances regularly involve language switch either in the repairable or the completion as in (1).

(1) L: 'hun' sche --- 'bliver'

[*hun* = 'she', *bliver* = 'become']

With **intermediate learners,** the need for self-repair will still be fairly strong, and it should now be matched by sufficient ability to self-repair. The primary motive for self-repair is functional, i.e. the learner experiences a mismatch between his communicative intention and the linguistic means by which he realized it in the first place. Such functional repairs include specifications.

(2) L: I was er driving a bike – er – motorbike

In the majority of functional self-repairs at this level, the repairable is a product of the communication strategy of language switch, i.e. a Danish lexical item.

(3) L: I don't feel it's er – the right class er – you haven't got the – eeerm – 'sammenhold' – eer – well you – you haven't er – it very good good together [N:mm] you are split up in – in a small er groups

[*sammenhold* = 'group feeling']

The occurrence of formal self-repairs will depend both on the learner's formal linguistic proficiency and the extent to which he self-monitors his performance. For instance, out of the eight self-repairs performed by our gymnasium learner, only one is a formal repair:

(4) N: do people not worry – I mean when there – are so few jobs – available
L: (clicks tongue) [N:mm] well we talked about – 'eller' talks – talk about it – but er – not very often

[*eller* = 'or']

Advanced learners should have little need to initiate self-repair as far as the comprehensibility of their utterances is concerned, while at the same time their ability for self-repairing is high. Whether or not they self-repair is therefore not so much determined by an 'objective' need for repair as by what they consider appropriate communicative behaviour on their part. Accordingly, we find fewer **functional** repairs, most of which are motivated by unsatisfactory word choices, and even fewer repairables involve language switch. In fact, our university student's self-initiated self-repairs do not include a Danish trouble source at all. The extent to which advanced learners identify and decide to self-repair on **formal** trouble sources will primarily depend on their level of linguistic aspiration, which might in turn be a function of their need for defensive face-saving. Both factors will determine how much the learner self-monitors his speech for formal correctness. Furthermore, if the learners were/are exposed to a type of foreign language teaching which puts a strong emphasis on formal correctness, this might encourage them to self-monitor and self-repair a lot. These factors seem to operate in the cases of our advanced learners, with whom formally motivated self-initiated self-repair is the most frequently occurring repair pattern. In particular the university student shows clear indications of embarrassment at her formal faux pas:

(5) L: no it's it's also something with erm economy to [N: mm] do (looking concentratedly in front of herself, speaking overdistinctly at reduced speed:) it has something to do with economy

4.2.2. Native speaker self-initiated self-repairs

At the **elementary** level, one might hypothesize that the native speaker's need for self-repairing is inversely proportionate to the degree to which she simplifies her speech. Native speakers who do not reduce very much lexically or syntactically have to other-monitor extensively and self-repair.

The native speaker involved in the six conversations clearly prefers not to simplify formally but self-repairs instead. At the elementary level, this type is so frequent that it accounts for one half of all the repair sequences we have identified. The native speaker's self-repairs all aim at 'explicitizing' what she is trying to communicate. And as nearly all the native speaker's turns are questions, it is not surprising that many of the repairs involve the formulation of a question (typically a **wh**-question) in a more explicit or concrete way (often a **yes/no** question):

(6) N: what – do you do – you do English
L: yes

Another highly frequent type of repair at this level involves referential aspects, typically with respect to lexical items but occasionally also referential problems caused by the native speaker's use of pronominalization and ellipsis:

(7) N: perhaps one day – maybe they'll come mm
L: 'ja'

(8) N: do you do that at school as well – er at school – d'you make pictures
L: no

With both learners at the elementary level we find a special variant of native speaker self-initiated self-repair, occurring with a learner reply or uptaker **between** the trouble source and the repair:

(9) (talking about football)
N: are they good
L: yes they can
N: are they good at football
L: yes

In this example, the learner's first reply is not coherent with the native speaker's first question, which may have caused the native speaker to self-repair even when the learner has apparently used an appropriate reply/uptaker:

(10) N: Ballerup – [L: yes] is that a long way from here
L: yes –
N: lots of kilometres – . . .

On the basis of examples like this we hypothesize that at the elementary level, the native speaker is uncertain how to assess the learner's replies and uptakers in general: there is a need for double-checking.

At the **intermediate** level we would expect to find the same types of native speaker self-repairs as at the elementary level, although the need for self-repairing (caused by the learner's limited receptive competence) should be reduced. This is borne out by the two conversations at this level: the native speaker's self-repairs 'explicitize' (mostly lexical items), and they amount to less than a third of all the repair-sequences in the two conversations.

It is worth mentioning that at this level we find no examples of the native speaker self-repairing **after** a reply or an uptaker. We assume that at this level the native speaker has sufficient confidence in the learner's ability to reply/uptake appropriately.

Finally, the need for the native speaker to self-repair at the **advanced** level should be slight as learners at this level have acquired almost native-like listening comprehension. The few cases we find of the native speaker self-repairing are triggered off by the learner not taking her turn at the appropriate point in the discourse:

(11) N: do you have to do sciences – as well
L: (no reaction)
N: er physics and math and . . .

4.2.3. Learner other-initiated self-repairs

At the **elementary** level, there is a strong need for repairing on the learner's turns, but as it can be hypothesized that elementary learners are not very good at assessing when their contribution to the interaction necessitates a repair, the initiative for initiating repair remains with the native speaker. As she is aware of the learner's limited ability to complete the repair, the result is that the native speaker prefers to complete the repair herself (see below). This hypothesis is supported by the two conversations at the elementary level in which we find only 3 learner other-initiated self-completed repairs but 23 learner other-initiated other-completed repairs.

As there is still a strong need for repairing on the learners' performance at the **intermediate** level, and as the learners' ability to complete repairs is higher, we would expect to find more other-initiated self-completed repairs at this level than at either the lower or the higher level. This is what we find in the conversations, as exemplified with the following:

(12) N: have you been outside Denmark
(. . .)
L: ('ʃa: tə)
N: (appeals non-verbally)
L: **char**ter tours

At the advanced level the need for the native speaker to request a repair on an item in the learner's performance is generally low. If the need should arise at this level, one might expect a preference for this repair type rather than for other-completion, following the general preference for self-correction in native speaker – native speaker interactions. In our conversations, the university student is requested to self-repair three times, whereas the native speaker only other-repairs once (see below):

(13) L: we share the apartment (...)
it's er has four and a half no rubbish three and a half room
N: what's half a room
L: (giggles) it's a small room

4.2.4. Native speaker other-initiated self-repairs

One might expect considerable need for **beginning learners** to initiate repairs in the native speaker's performance, due to problems in listening comprehension. However, whether this prediction actually bears out depends at least on the following variables: (a) the native speaker's use of foreigner talk; (b) her use of self-initiated and self-completed repairs; (c) the learner's decision as to 'reduce' or 'achieve' communicative goals in the ongoing discourse. Our native speaker, while not using foreigner talk, performs lots of self-initiated self-repairs when conversing with the beginning learners – this constitutes in fact the largest repair class at this level (see above). Furthermore, our beginning learners can clearly be characterized as reducers: they abandon a communicative goal as soon as a receptive or productive problem arises, rather than work out a solution which allows them to maintain the goal. There are therefore very few occurrences of this repair pattern in the beginners' performance, one of which is the following:

(14) N: do you do any games
L: games
N: games – do you play anything other than football

At the **intermediate level**, the learners' receptive skills are certainly better but still not sufficiently well developed in order for them to do without initiating native speaker self-repairs. Again, the degree to which the native speaker adjusts her performance to her interlocutor's proficiency level and the learner's decision to reduce or achive will determine the occurrence of this repair type. Our gymnasium learner, for instance, is very much of an 'achiever', being actively involved and apparently genuinely interested in the conversation. The native speaker uses unreduced English on her and self-initiates a self-repair only once. It is therefore not surprising that the learner runs into comprehension problems occasionally and requests repairs from the native speaker. The majority of the trouble sources involve a lexical item or a collocation. The learner initiates the repair by using an unspecific non-verbal (looking appealingly) or verbal repair request (*what, pardon, hvad behager*), or a re-present with rising intonation. In completing the repair, the native speaker makes use of various completion formats, whose choice depends both on the specificity of the learner's repair initiator and the native speaker's assessment as to what the trouble source might be. (15) illustrates how the native speaker in reaction to the learner's first unspecific repair requests simply repeats her utterance, whereas the learner's subsequent specific repair initiation (a re-present) gives a clear indication of the trouble source, which the native speaker then repairs on by using a paraphrase.

(15) N: do you often perform out –
L: er (visual appeal)
N: perform
N: do you often go out and put on your show –
in other places

Due to their high receptive proficiency, **advanced learners** should have little need for initiating self-repairs from the native speaker. However, this effect might be counterbalanced to some extent if their comprehension task is made more difficult by more complex input from the native speaker. Moreover, face-saving will probably play a more important role at this level: the learners might be more reluctant to admit ignorance by initiating a repair from their native interlocutor. The effect of this psychological variable can possibly account for the difference in occurrence of this repair pattern in the conversations with the two advanced learners: whereas the student from the college of education, who does not seem to experience the native speaker's linguistic superiority as face-threatening, freely initiates self-repairs from her interlocutor, the more ambitious university student refrains from doing so completely – even in cases where she quite obviously did not understand the native speaker's utterance as in (16).

(16) L: - - - and then he can read on er continue reading [N: mm] erm something called 'cand. merc.' erm
N: that's a kind of degree isn't it
L: no no
N: isn't it
L: no it's it's something with erm economy [N: mm] to do
(*cand.merc.* = degree in commerce)

4.2.5. Learner self-initiated other-repair

Again, the need for appealing to the native speaker for assistance chould be inversely proportionate to the learner's proficiency level, but reduction rather than achievement behaviour might overrule this need at the **beginning level**. As our beginners have a strong tendency to reduce their communicative goal when they encounter linguistic problems, it is consistent with their overall communicative behaviour that each of them appeals for assistance only once during the whole discourse.

The same holds true for the **intermediate learners**, where the 10th former, a 'reducer', appeals just once, whereas the gymnasium student, an 'achiever', appeals more often in order to elicit a lexical item from the native speaker which is not part of her repertoire. All of her appeals are combined with non-cooperative communication strategies, and the native speaker's repair completion is regularly taken up by a receipt or a re-present of the substituted item:

(17) L: he should sail [N: mm] he is a sails – man – 'nej' no
N: sailor
L: sailor – salesman that's something else

At the **advanced level**, there should be little need for appeals, due to the learners' high productive competence. The actual occurrence of self-initiated other-repairs may be reduced even further if learners are concerned about defensive face-saving. However, the few instances in our data indicate occasional productive problems even at the advanced level. Again, the difference in face-saving behaviour can account for the higher occurrence of self-initiated other-repairs in the college of education student's conversation compared to the university student's, and is paralleled by their initiations of native speakers' self-repairs, as mentioned above. As in the case of the gymnasium learner, the repairable produced by the college of education student involves a lexical problem which she attempts to solve by means of both uncooperative and cooperative communication strategies, and the repair completion provided by the native speaker is followed up by a re-present.

(18) L: I think it's – it has been – rather good that she came into a – new [N: mm] 'bømehave' children's institution [N: mm] I don't know what it's called
N: er er I we call them kindergartens
L: kindergarten
N: yeah
L: yes
(*børnehave* = 'kindergarten')

4.2.6. Native speaker self-initiated other-repairs

Although this repair type might be expected at the advanced level, this being closest to interactional norms holding for native speaker-native speaker conversation, the situation even at this level is too asymmetric for the native speaker to elicit an other-repair. In all the six conversations, there is not a single occurrence of a native speaker self-initiated other repair.

4.2.7. Learner other-initiated other-repair

This repair-type has already been dealt with indirectly above in connection with learner other-initiated self-repair, and we shall briefly repeat out hypotheses here: At the **elementary** levels there is a strong need for other-initiation of repair, and as the native speaker does not expect the learner to be able to self-repair, the result is that the native speaker completes the repair herself. This is typically done by means of a repetition of (part of) the learner's turn including a (suggested) correction of the trouble source. In most cases, the native speaker's repair completion is then followed up by the learner:

(19) L: I have 'selv'
N: you have it yourself
L: 'ja'

This way of repairing on a trouble-source in the learner's performance is by far the most common at the elementary level (23 repair sequences out of 36 sequences in all dealing with problems located in the learners' performance belonged to this type).

At the **intermediate** level, there is less need for the native speaker to make use of this type of repair, which is potentially face-threatening. The repair typically has the function of a repair suggest, to be followed up by the learner.

Finally, at the **advanced** level we would expect to find very few cases of learner other-initiated other-repairs, and examples are in fact hard to find in the conversations.

4.2.8. Native speaker other initiated other-repairs

This repair type should be rare at all levels: the **beginning learners** will have a considerable need for initiating, but hardly the proficiency to complete a repair on a trouble source produced by the native speaker. **Advanced learners**, on the other hand, should have few comprehension problems which make the initiation of a repair necessary, and in the instances where they do, they will probably leave it to the native speaker to complete the repair, thereby observing face-saving conventions according to which native speaking participants organize their repair behaviour. Because of this, the occasional other-initiated other-repairs performed by advanced learners are most likely to have the form of a repair suggest, which requires confirmation by the native interlocutor.

(20) N: do you know this city very well
L: Copenhagen
N: yeah

In our data, native speakers' other-initiated other-repairs occur only once in each of the conversations with the beginning and advanced learners, and not at all in the intermediate learners' conversations.

5. Concluding remarks

As can be seen from the hypotheses we have just established, only one type of repairables has been considered, namely repairables due to linguistic code problems. The reason for this 'preference' for metalingual repair work is that the six data sets analysed contain no single occurrence of metacommunicative repairs, i.e. repairs directed towards the illocutionary force of utterances. This is undoubtedly a consequence of the fixed discourse structure of the conversations, which is almost invariably question-answer-follow-up with a strong tendency for the native speaker to perform the questions and the follow-up moves (cf. Holmen 1981 for a discussion of the discourse structure of the PIF conversations). One might therefore hypothesize that other types of conversational data between learners and native speakers would exhibit a more extensive use of the metacommunicative function. However, we do not consider this hypothesis very likely and for the following reasons. Making use of the metalingual function is intimately related to the social role of being a foreigner, which means that there is little reason for defensive face-saving if the learner accepts this special role (cf. Harder 1980 for a discussion of the 'reduced personality' of the foreign language learner). We therefore believe that pragmatic flaws are potentially more threatening for the learner's face as a communicator in general, independently of whether he communicates by means of his native or a foreign language, than are grammatical, lexical and propositional flaws.

In section 2, we discussed the relationship between repairs and uptaking, thereby highlighting an area of overlap between the metalingual/metacommunicative and the phatic function. It will be an interesting research task to find out how other types of discourse regulation and the means through which they are performed tie in with repairs. The following preliminary assumptions can be made:

Turntaking takes place when the former hearer initiates a self-repair or an other-repair on the former speaker's utterance; compare

S1: 'she wants to study archeology'
S2. 'are you sure it is archeology?'
S1. 'no I meant anthropology'; or

S1. 'she wants to study archeology'
S2. 'you mean anthropology'
S1. 'yes you're right'.

Note that in both examples, the assumption behind the initiation of a repair by S2, viz. that S1 produced a repairable, is confirmed by S1 (in the first instance by means of a self-repair, in the second through a follow-up move subsequent to the other-repair). However, one might also wish to include cases in the repair system where the assumed repairable turns out to be an adequately chosen item: thus S1 in the above examples might confirm his original choice, or reject S2's repair suggest; compare

S1. 'she wants to study archeology'
S2. 'are you sure it is archeology?'
S1. 'yes I'm positive'.

S1: 'she wants to study archeology'
S2: 'you mean anthropology'
S1: 'no I did mean archeology'.

As both the function and the structure of such check sequences are very similar to the earlier mentioned cases which included a 'true' repairable, one might decide to incorporate them into the repair system. As regards the relationship between turntaking and other-initiation of repair, a question to be looked at is whether turntaking in such cases is performed by means of a gambit, which then probably not only has a discourse-regulating (phatic) but also a mitigating (modal) function, or whether turntaking gambits are 'deleted' if the floor is claimed for repair purposes:

S1: 'she wants to study archeology'
S2: 'well are you sure you mean archeology?'.

There is a clear link between repair and **turnkeeping** in that turnkeeping gambits often provide the time necessary for planning a self-completion of a repair, e.g. in

> 'I can't find the screwdriver – no – what's it called – er – erm – I mean the wrench'.

Turnkeeping gambits are utilized in such instances in order to observe the interactional preference for self-repair. A problem to be considered could be how long a period of time speakers are allowed to use for self-completing a repair or, put differently, how long co-participants are prepared to delay an other-completion. A specification of the parameters which govern the possible length of turnkeeping for self-repair completion may be useful.

Turngiving can be performed by means of a check for a confirmation or correction, or to self-initiate an other-repair, for example

S1. 'and then he asked me where I'd put the – er – type – writer – is that what you call it?'
S2: 'yes type-writer'

S1. 'and then he asked me where I'd put the – er – writing – machine – is that what you call it?'
S2. 'we say type-writer'

S1. 'and then he asked me where I'd put the – er – what do you call it the machine one uses for writing'.

Structurally, all self-initiated checks or other-completed repairs involve turngiving, just as all other-initiation of repair involves turntaking. Yet the other-initiations listed above differ in their presuppositions: In the first and second example, S1 has a hypothesis about the lexical item by means of which he can express his intended concept (whether the hypothesis is correct or false in terms of L2 is irrelevant from S1's perspective), whereas he has no such hypothesis in the third example, where he has to paraphrase the intended concept. If one pursues the direction indicated by these observations, one has to go beyond discourse analysis proper and adopt a psycholinguistic perspective. This shift of perspective ties up with an issue discussed earlier in this paper (see section 3. above), viz. the relationship between descriptive and explanatory approaches to repair work.

In discussing the repair framework established by Schegloff/Jefferson/Sacks we noted that very little attempt was made by them to **explain** the preference for self-repair except in terms of the discourse structure itself, and we suggested that the concept of face might be relevant for such explanation. We referred to face work occasionally in our hypotheses about the occurrence of the various repair types at the three levels of proficiency, but apart from such sporadic explanatory notes we have not attempted to set up hypotheses of an explanatory character in the paper. We would like to finish off the article by briefly considering what questions could be pursued in throwing more light on why learners and native speakers should opt for specific repair types in specific interactional situations.

As for the **native speakers** the distinction mentioned by Ferguson (1977) between linguistic simplification and 'clarifying modification of speech' (including self-repairs) seems of relevance here. If the native speaker decides not to simplify linguistically there will be an increased need for metalingual and metacommunicative activity. We need to know more about what principles can account for the native speaker's choice of one or the other type of simplification and, given the latter type (repair work), what are the relevant behavioural features in the learner for the native speaker to decide that repair work is needed or has been successfully completed.

The **learners**' repair behaviour is probably best explained as a product of transfer from communicating in their L1 and transfer from the foreign language classroom, in the way that their knowledge of the different repair types is based on transfer from L1 communication and their preferences for specific repair types is conditioned by the interactional structure of the classrooms in which they have learnt their English (cf. Færch/Kasper 1982 for a more detailed discussion of 'procedural knowledge' in L1 and interlanguage). What one would like to investigate are therefore questions like the following: to what extent are learners encouraged to self-monitor and other-monitor their performance by their teacher? to what extent does the teacher self-repair rather than encourage the pupils to make use of inferencing procedures or – if these fail – request a repair? Furthermore, if the teacher relies on the pupils to initiate repairs, does this happen simply by the pupils not reacting to a teacher question (lack of uptaking) or does he encourage them to elicit **specific** types of repair (cf. Færch 1981 for a discussion of inferencing procedures and different types of repair requests in lexical interpretation)?

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The segmentation problem in the study of impromptu speech

Abstract: A fundamental problem in the study of spontaneous speech is how to discover and cut off segments that are relevant with respect to the study of linguistic structures or speech planning or speech production or communication strategies. For an adequate analysis all sorts of criteria have to be considered, and (ideally) be included in a set of operational rules, if possible arranged in a hierarchical order. Particularly, such a procedure has to be worked out and followed if a large corpus has to be analyzed, for instance, by a research group, to make it possible to compare the results from various analyses.

We have to consider features from various levels in text analysis: prosodic features, syntactic features and speech act functions. If all such data are added to a word-by-word transcription, then it would be possible to make a detailed study of the functions of various boundary markers in the flow of speech, and also to study to what extent these markers are coordinated. In this short presentation I will particularly stress the need of such transcriptions. For me this is of course more important than my own small effort to apply a simple analytical model to a short text extract (as I have done in my paper at this conference).

1

Anyone who has tried to analyze sequences of impromptu speech knows the difficulties one meets with in the very first steps of the analysis, namely in the segmentation of the text into relevant units and the subsequent classification of these units. Part of the difficulty is caused by the fact that, as a rule, spoken texts are characterized by all sorts of irregularities and inadequacies. They are seldom available in complete transcription including those prosodic and paralinguistic features that are needed for a full understanding of relevant syntactic, semantic and contextual coherence. Another difficulty lies in the fact that various sets of criteria can be applied to the texts in the segmentation procedure, very often giving different results. Sometimes the analysis is made more or less intuitively, the analyst being neither fully aware of his criteria nor completely consistent in his handling of them.

My own impression is that it is difficult to come to an absolute, final solution, in the sense of a single one-dimensional segmentation of a spoken text. We have to consider various levels of analysis based on various sets of criteria. The results depend ultimately on the purpose of the analysis, e.g. whether it is to show the speaker's ability to produce long well-formed syntactic structures, or his manner of planning his speech in phrases interrupted by pauses and hesitation sounds, or his strategies in speech interaction with other persons.

In the flow of speech we may discover and react to various boundary markers. Only through a careful analysis will we be able to detect their varying functions and the interplay of various markers. In this article I will present some obvious sets of criteria for the segmentation of impromptu speech. Then I will show how the use of various criteria may give different results. Finally I will try to describe the functions of various boundary markers and discuss their places in a hierarchical structure.

While working on the subject I have read with interest a short but elucidating article by Nils Erik Enkvist and Hans Nordström, "On Textual Aspects of Intonation in Finland-Swedish Newscasts" (Studia Linguistica XXXII, 1978). In this work intonational phenomena have been studied in read texts and from the listeners' point-of-view. Can a listener judge whether a fragment belongs to the initial, middle or final part of a text unit? Is prosody a relevant feature in this context? The study has given some positive results which indicate that intonation patterns should be regarded as an important feature also in discourse analysis and text linguistics.

In contrast to Enkvist and Nordström I will base my own article on specimens of impromptu speech, and my starting-point is a linguistic analysis of the texts. At a later stage my preliminary results may be supplemented with data from perception tests. Theoretically and methodologically I have been particularly influenced by a book which was published in 1958 as an exponent of the classical American structuralist tradition. I am referring to Archibald A. Hill's *Introduction to Linguistic Structures*, which is far more original and advanced than its modest title might suggest. Of particular importance for the present study is Hill's demonstration of how intonation morphemes may be combined, through "phonological linking", into larger constructions with boundaries wider than the single phrase. For my transcriptions I have also used the same notation system as Hill, based on the familiar

Trager & Smith model. This model seems to be quite adequate for a prosodic analysis of the dialect represented in my examples, the Negro American dialect of Washington, D.C.

As demonstration material I have taken short extracts from a conversation which was recorded in October 1966 in a small one-family home, located in a central low-income area within Washington. The participants of the conversation are Michael Jones, a ten-year-old Negro boy; his mother Patricia; and Margy Gurney, a white research assistant. The recording has been published earlier in my book "Conversations in a Negro American Dialect" (Center for Applied Linguistics 1967), together with other recordings from the same time and place. The extracts have been taken from the beginning of the conversation. It starts directly with PJ rebuking her son (Text A). After that a short passage has been omitted. Here MG enters the conversation and asks MJ to tell her what he and his father talked about during an earlier recording session. After that Texts B and C follow in an uninterrupted sequence. PJ is the main speaker in Text A, MJ in B, and MG in C.

In the *Appendix* the texts are segmented into phonological phrases which are numbered. The appendix also contains additional data from an analysis of Text A:

I : phonological phrases 1 - 57
II : beginning of intonation superfix (▲)
III : sentence units
IV : terminal junctures
V : beginning of speech act unit

These categories will be explained in greater detail in the following discussion.

2

First of all, a text may be segmented into PHONOLOGICAL PHRASES. A phonological phrase consists of segmental material which is linked together by prosodic features: a stress pattern (including at least one instance of primary stress) and an intonation contour ended by a terminal juncture. There are three types of terminal juncture which have the following acoustic features in the relevant dialect:

The double-bar juncture / ‖ / is characterized by a short final rise in the fundamental frequency; this rise opposes the double-bar juncture to the two other types of terminal juncture.

The single-bar juncture / | / is characterized by sustained or increased intensity combined with sustained fundamental frequency.

The double-cross juncture /# / is characterized by absence of final intensity, while the fundamental frequency may be either sustained or, more often, lowered (changes in frequency, in this case, are always marked by numbers indicating pitch levels).

Terminal junctures have been marked in the position immediately before a pause. The juncture system is used to describe characteristic features in the articulation in this position. Occasionally, terminal junctures have also been marked in positions where there is no immediately following pause. This is the case when there is a significant shift in the speech tempo or in the sound quality, indicating that the speaker has made an intentional break in his utterance. Such boundaries have been marked by terminal juncture / | /. The same mark has been used to signal clear rhythmic boundaries within a phrase. If a syllable within a phrase is pronounced with the decreasing intensity (and the lowered frequency) that is characteristic of the double-cross juncture, this has also been marked (by /# /).

The terminal junctures /# / and / ‖ / normally occur at the end of sentences, while / | / normally occurs within sentences, dividing them into two or several phrases. For this reason /# / and / ‖ / may be regarded as final junctures, and / | / as a non-final juncture. A third category may also be considered in connection with the occurrence of glottal stops in phrase final position, cf. Text A, phrase 54 (A:54):

$\overset{2}{\text{I}}$'ll sèe to you gèttin' ah$\overset{3}{\text{é}}$a' ʔ |

Glottal stops occur in final position in a number of complete sentences, as substitutions for stop consonants. The contrast between the terminal junctures /# / and / | / is neutralized if the phrase ends with a glottal stop. In this case, the phrase end always has the same character acoustically as the single-bar juncture, since the glottal stop cannot be combined with the decreasing intensity of the double-cross juncture. Phrase endings in glottal stops have therefore to be classified as a special category. The juncture in these cases can be described as a final single-bar juncture (F/ | /).

The character of the glottal stop may illustrate how important it is that the phonological segmentation is consistent with relevant features in the sound system of the dialect concerned. This may also be shown by another example.

There is a practical problem in phonological segmentation (as described above): it is difficult to discover terminal junctures in positions where they are not immediately followed by a pause. It seems to be particularly difficult to find single-bar junctures in this position, and to persuade others of their existence. According to Hill, a phonological phrase may contain one single primary stress. This means that in an utterance there must always be a terminal juncture between two primary stresses. Hill has based his analysis on his own Midland dialect. In my analysis of the Washington Negro dialect I found it impossible to follow his principles in this respect. A single phrase was often found to contain several syllables with primary stress, which I found to be a characteristic feature of this dialect. A phonological phrase in this dialect may thus be described as a segment terminated by a terminal juncture and connected with at least one primary stress.

Some phonological segments terminated by a pause or a terminal juncture lack primary stress. For this reason they may be regarded as incomplete and thus not classified as phonological phrases in a strict sense. Phrases A:3, 12 and 36 are typical cases of such performance errors.

3

A segmentation based on purely syntactic criteria (without reference to prosody) is often indicated, particularly when transcriptions are incomplete and data on prosodic features are lacking. In such cases the segmentation procedure has to be based on some sort of intelligent reading of the text, with the purpose of discovering sequences which could be regarded as linked together through a network of syntactic relations. Such an operation is not unproblematic. Often various solutions seem to be possible and even well motivated. Examples of such ambiguities are easily found, e.g. in Text A. Should phrases 20-22 be regarded as two coordinated expressions forming one single fragment? or as two separate fragments? Should 27-30 and 31-32 be regarded as two separate questions (the second syntactically a fragment) – or as one single question? Also 44-49 and 50-52 are problematic.

In such cases it is practical to have a handy operational rule, to avoid inconsistencies in the analysis of a large corpus. A simple procedure would be to look for syntactic segments of a maximal extension. This means that connected sequences should be regarded as parts of one macrosegment – a MACROSYNTAGM – whenever syntactic relations could be assumed to exist between the parts. If it is possible to read a sequence of phonological phrases as belonging to one coherent sentence or sentence fragment, then this should be a relevant criterion for a segmentation on the purely syntactic level. Thus 20-22, 27-32, 44-49 and 50-52 should be regarded as four macrosyntagms. This is a method that has been used in the Swedish *Talsyntax* project, a study of syntactic structures in modern spoken Swedish.

On the other hand, if we also consider suprasegmental criteria, we may get a modified picture of the syntactic segments. As a matter of fact, very often it is necessary to apply suprasegmental criteria to the syntactic analysis. Features of stress, pitch and juncture may be necessary to decide whether a segment should be regarded as an interrupted or completed sentence, or whether a segment should be classified as a question or as a declarative sentence (cf. A:5) etc. But these prosodic features may also have a more direct influence on the results of the segmentation. Junctures /# / and / ‖ / are final, in the sense that they normally occur at the end of complete sentences. This observation could easily be formulated as a general rule for the segmentation procedure: all sentence units are not terminated by a final juncture, but a final juncture always marks the end of a (prosodic) sentence unit. Syntactically A:6-7 may be interpreted as one complex sentence fragment, consisting of two sentence structures. But phonologically the sequence may be regarded as two separate sentence structures, each terminated by a final juncture. With another intonation contour the segments might have been more closely linked together, e.g.:

```
2          3  2                   32    2  2
about de wáy you're àcting in schóol of látely  |  (p)

 2      2     23
whìch is nót vèry níce  # (p)
```

However, this rule cannot be applied automatically. One also has to consider other syntactic realities, for instance whether a sentence in the deep structure may contain two or more conjoined sentences and thus be regarded as a compound sentence. This is an important issue which I have not been able to look deeper into at present. But special attention may well have to be paid to the position of the final terminal juncture, relative to the syntactic structure (as shown e.g. by a tree diagram). This means that, in some explicitly stated way, both phonological and syntactical criteria have to be integrated into one single analysis. A first, tentative segmentation based on purely segmental-syntactic criteria may be modified by phonological criteria, especially occurrences of terminal junctures. But then these phonological criteria have to be revaluated with regard to syntactic features in the internal structure of the sequence.

This suggests that two classificatory principles may come into conflict, but also that such conflicts should be solved through the introduction of an integrated set of criteria and segmentation rules. The results of this combined phonological and syntactical segmentation may be called SENTENCE UNITS. The sentence units are primarily various types of complete sentences: declarative sentences, special questions, general questions, and commands. Direct addresses, interjections and "fragments" have also been found necessary and sufficient for a segmentation of the text into contingent but not mutually overlapping sentence units.

A syntactic segmentation based on the occurrence of final terminal junctures may seem appropriate when applied to one particular type of text, but may lead to absurdities in other cases. The difference may be demonstrated by a comparison between Text A and Text C. Obviously the two speakers make use of different devices to link their phrases together into meaningful sequences. In PJ's speech, final terminal junctures are used as distinct markers at the end of sentence units. MG, on the contrary, makes abundant (and functionally rather meaningless) use of the double-cross juncture. But the staccato character of her utterance is compensated for by an effective use of pitch linking. In her utterances, consisting of extremely short phrases, intonation superfixes have a function similar to that of the terminal junctures in PJ's speech.

This leads us to another aspect of the segmentation problem.

4

Intonation contours consist of sequences of pitch levels. An intonation contour is terminated by a terminal juncture, and it therefore belongs to the phonological phrase. Phonological phrases can be linked together by means of the non-final single-bar juncture, and also by pitch linkage, even across a terminal juncture. Pitch linking occurs whenever the final pitch level of a phonological phrase is identical with the initial pitch level of the following phonological phrase. Thus phrases A:1-4 are linked together not only by the non-final terminal juncture / | / but also by an *intonation superfix*.

In column II the black triangles indicate the beginning of an intonation superfix. This superfix may start either at the beginning of a whole utterance or wherever there is an intonation break within an utterance, consisting of a pitch shift between two sentence units – across a final terminal juncture.

The intonation superfixes seem to be connected with those parts of a speech event which are called SPEECH-ACT UNITS, "acts such as making statements, giving commands, asking questions, making promises, and so on" (Searle). As is seen from column V it is fairly easy to attach a specific speech-act label to each segment dominated by an intonation superfix.

Similar results may be obtained by an analysis of Text B, where MJ talks about his earlier conversation with his father. Here B:1-3 constitutes one speech-act unit, where MJ presents the topic of the conversation. In 4-15 he relates the content of his father's answer. The concluding phrases 16-18 contain material which may be typical of utterance-final segments, repetitions of what has already been said and efforts to express the statements more clearly. The speaker is here filling a pause, he has nothing new to add, and he is waiting for the interlocutor to take over and react to his utterance. These paraphrases may be regarded as constituting two final speech acts (16 and 17-18).

A similar speech strategy may be observed in Text C. MG starts with three speech-act units (1, 2-3 and 4), each signaling attention. Unit 4 leads syntactically over to 5-9, where MG tries to establish contact with the interlocutor. In 10-16 she suggests a topic. This topic is specified in two final speech units, which have the function of activating MJ (17 and 18). His reaction finally comes in speech act 19.

So it seems that intonation superfixes have a double function in speech. They serve as markers of syntactic boundaries (together with the terminal junctures), but also as signals to the listener that he has to react differently to various parts of an utterance. The beginning of a new superfix means that the listener must be ready to make a shift in his basic attitude towards the speech segments. "You've just got a piece of information – but now you must be prepared that something different might follow, a command or a suggestion or a conclusion . . ."

5

In this sketch I have tried to outline various levels for the segmentation of utterances in impromptu speech. To summarize:

a. An utterance may be segmented into PHONOLOGICAL PHRASES, characterized by a terminal juncture and a stress pattern with at least one item with primary stress.

b. An utterance may also be segmented into MACROSYNTAGMS on the basis of an intelligent reading of the text with the purpose of discovering potential maximal sequences which are linked together by networks of syntactic relations.

c. The segmentation into macrosyntagms may be modified by means of phonological criteria. A macrosyntagm may be divided into two or several SENTENCE UNITS, each terminated by a final terminal juncture. This operation must, however, be counterbalanced with regard to particular features in the hierarchical internal structure of the macrosyntagm.

d. A sequence of sentence units may be linked together by means of an intonation superfix, characterized by an initial pitch shift (contrasting with the final pitch level of immediately preceding segment). Of course, also a single sentence unit may be dominated by an intonation superfix. Sequences that are dominated by an intonation superfix may be regarded as SPEECH-ACT UNITS, to the extent that they manifest special speech-act functions in the speech situation.

I want to stress that I regard this model as highly tentative and hypothetical. It is based on observations from a particular dialect. Therefore it is difficult to make any assumptions of its general significance. I would rather like to see it as a model for further empirical investigations of authentic texts. If various features are considered in the context of prosody, syntax and speech-act functions, then it would be possible to make a detailed study of the functions of various boundary markers in the flow of speech, and also to study to what extent these markers are coordinated, in texts representing various speakers, styles, languages and language varieties. Probably a computational analysis will be needed.

In an analysis of impromptu speech there is always a risk that the analyst becomes a victim of self-illusion: that he hopes to find what he is looking for and that he interprets his acoustic material more or less according to his expectations. This is a dangerous temptation, especially as it is often very difficult to classify prosodic elements in actual spontaneous speech by a given, uniform yardstick. For instance, the four pitch levels have no absolute values, only relative ones, and in reality the "levels" might look more or less like a diffuse continuum. The problem of levels can best be tackled in experimental situations where minimal contrasts help to reveal basic "-emic" patterns. A prosodic analysis of spontaneous speech must thus be based on an effort to discover the underlying phonemic system of stress and intonation.

The results of my comparison between intonation superfixes on the prosodic level and speech-act units on the semantic level may raise a suspicion: is this too good to be true? In order to justify myself I want to stress that originally my transcriptions were made in order to explore intonation patterns within the sentence unit. At that time (1967) I did not know anything about text linguistics or speech-act analysis. This makes me even more curious about the possibilities to use the texts for a more comprehensive study of the role of intonation in speech-act units and discourse analysis.

Finally, I would even go so far as to say that texts which show a structure that in many ways seem to go against the scheme presented above are not necessarily to be seen as counterexamples to the scheme as a whole. Even at discourse level we have to retain a distinction between "pragmatic competence" and "pragmatic performance". Our pragmatic competence dictates the norms we attempt to follow in conversation, or in a narrative. It is the yardstick against which we can evaluate and compare the actually occurring verbal output. Speakers' performances may be influenced by such non-linguistic aspects as nervousness, pure speech defects, or even a heavy consumption of alcohol. The scheme presented above seeks patterns of structure in the same way as the ethnomethodological approach: texts and discourses are presumed to have a superficial cohesion, reflecting an underlying coherence. This cohesion, I claim, is structurally manifested in the interaction between prosodic units, macrosyntagms, and speech acts.

APPENDIX

Extracts from a conversation recorded 20 October 1966, Washington, D.C.

Speakers; Patricia Jones, Michael Jones, Margy Gurney.

Abbreviations:

DS = declarative sentence
GQ = general question
SQ = special question
C = command
DA = direct address
I = interjection
F = fragment

Text A

2
PJ 1. well
4 3
you know what
3 3
Michael | (p)
3 3 2 2
2. I'm not tryin' to cut you acro' |
2
3. cu- |
2 32
4. cut across you # (p)
2 3 2 3 2 2
5. but you know a good thing for us to talk abou'
2 2 2
right before the presence of doctor Lomans
2 3
an' Margy # (p)

Analysis of Text A

I : phonological phrases 1 - 57
II : beginning of intonation superfix (▲)
III : sentence unit
IV : terminal juncture
V : beginning of speech act unit (a - ŏ)

	I	II	III	IV	V	
PJ	1	▲	I		a	(rhetorical) question: hinting at a topic
			GQ			
			DA	|		
	2		DS	|		
	3		"	|		
	4		"	#		
	5		GQ			
				#		

```
        2         3   2                  32      2   1
     6. about de way you're acting in school of lately# (p)

          2       2        23
     7. which is not very nice# (p)

        2             3    2            2    2  3   21
     8. an' maybe in some way they can help me an' you# (p)

         2     31
     9. how's tha'# (p)

         2
    10. well

           3   2      3   2                  3   1
        s'pose I let you tell them what has happened# (p)

         3 1   1
    11. recently# (p)

          1  2  1
    12. that I disl-|

        3  2  1
    13. I dislike# (p)

        2       3  2   3   2
MJ  14. I been talkin' out of | (p)

          3   2       32
    15. class a(t) schoo'# (p)

        3  2   32
    16. ac'in' up# (p)

        2       3                   3  34
PJ  17. an' did I teach you how to do tha# (p)

         2
MJ  18. no

         32
        mam# (p)

          4      3  2           21
PJ  19. what did I teach you to do# (p)
```

	I	II	III	IV	V	
PJ	6	▲	F	#	b	answer: suggesting a topic
	7	▲	F	#	c	comment on topic
	8	▲	DS	#	d	reference to other participants
	9	▲	SQ	#	e	question
	10	▲	I		f	invitation to talk
			C	#		
	11	▲	F	#	g	additions to f
	12		F	|		
	13		"	#		
MJ	14	▲	DS	|	h	answer
	15		"	#		
	16	▲	F	#	i	answer completed
PJ	17	▲	GQ	#	j	question
MJ	18	▲	I		k	answer
			DA	#		
PJ	19	▲	SQ	#	l	question

2 3 2 2
MJ 20. to sit on my | (p)

3
21. sea' # (p)

2 3 2 3 2 2 2 2 3
22. an" don' say a word until the teacher tell me # (p)

2 3 2 3 2
PJ 23. an' you fail(ed) to do tha' |

23
24. righ' # (p)

2
MJ 25. yes

32
mam # (p)

23
PJ 26. well # (p)

2 32 2
27. don't you think i' be a good idea for | (p)

2
28. us |

2 32 2
29. to sit down an' talk this over wi' Marg'

2 2 3
an' maybe she'll give us some o' her |

2 32 3 2 3 3
30. ideas abou' dis some other time || (p)

3 2
31. as to | (p)

2 3 2 3 3 3
32. whether you shou be doing these things or not || (p)

	I	II	III	IV	V	
MJ	20	▲	F	|	m	answer
	21		"	#		
	22	▲	F	#	n	answer completed
PJ	23	▲	DS	|	o	question
	24		I(GQ)	#		
MJ	25	▲	I		p	answer
			DA	#		
PJ	26	▲	I	#	q	connexion
	27	▲	GQ	|	r	question
	28		"	|		
	29		"			
				|		
	30		"	||		
	31		F(GQ)	|	(r)	
	32		"	||		

```
          2
MJ  33.  yes
          32
         mam # (p)
          3                        4   3   2    2
PJ  34.  because I don' think the teacher will like you
                    2  2
         very much longer |
         2                3 2          32
    35.  if you gonna continue to do this # (p)
         2     2
    36.  an' what's | (p)
           2       3   2     2
    37.  wha's so bad abou' dis |
         2       3  2
    38.  is the reason | (p)
         3  2               32                3  2 3  2
    39.  I have to go to school an' then when I go I have
                                             3 2
         to hear something that's very disagreeable about you
                                1  
         instead of something pleasan' # (p)
          2                           3  1
    40.  how do you think that makes me feel # (p)
          4           3               3  2
    41.  how do you think that makes me feel when I have
                               3  2        2
         to hear something unpleasan' when I | (p)
          3     2         3   1
    42.  firs' meet your teacher # (p)
         23
MJ  43.  ba # (p)
```

	I	II	III	IV	V	
MJ	33	▲	I		s	answer
			DA	#		
PJ	34	▲	DS		t	argument
				|		
	35		"			
	36		DS	|		
	37		"	|		
	38		"	|		
	39		"			
				#		
	40	▲	SQ	#	u	question
	41	▲	SQ		v	question expanded
				|		
	42		"	#		
	43	▲	SF	#	w	answer

2
PJ 44. yes

3 2 23 2 23 2 2
it is bad an' i's most embarrasing ‖ (p)

2 2
45. because | (p)

2 3 2 32
46. after I have to work all day long # (p)

2 3 2 3 2 3 2 2 3
47. an' come home at night an' then try to teach you

2 23
righ' from wrong # (p)

2 3 2 3 23
48. then you let me down # (p)

2 3 1 1
49. an' makes me feel terrible # (p)

2 3 2 3 2 3 2
50. in no future I would like for you very much

3 2 3 2 3 2
to try to better your conditions # (p)

2 32
51. an' see if you can't become a better chil'

32
in school # (p)

2 3 2 32
52. an' do as you are told # (p)

2 3 2 2
53. an' I'a promise you # (p)

2 3
54. I'll see to you gettin' ahea? | (p)

2 3 2 3 2
55. an' if you like to change the subjec' |

2 32
56. you can # (p)

2
MJ 57. yes

2
mam # (p)

	I	II	III	IV	V	
PJ	44	▲	I		x	argument
			DS	||		
	45		"	|		
	46		"	#		
	47		"			
				#		
	48	▲	"	#	y	argument continued
	49	▲	"	#	z	argument completed
	50	▲	DS		å	conclusion
				#		
	51		F/C			
				#		
	52		F/C	#		
	53		DS	#		
	54		"	?|		
	55	▲	DS	|	ä	invitation to change of topic
	56		"	#		
MJ	57	▲	I		ö	reaction
			DA	#		

Text B

```
            22
MJ    1.    yeah #(p)

            2 2      2     2
      2.    I as' him all abou' |  (p)

              2      2     2
      3.    what he do at work #

             2  3      2
      4.    he tells me #(p)

            2    3   2
      5.    an' I as' 'im #(p)

             2                 3   2 2
      6.    how do dey git paid I said #(p)

             2
      7.    [aː #](p)

      8.    (...)   (p)

            2    3   2  2
      9.    an' how do dey |

             2     32
     10.    come home #(p)

             2             3
     11.    how do dey git off |

              2    32
     12.    from work #(p)

             2  3     2        3    2      3   2
     13.    he said that the man blow a whistle #(p)

            2
     14.    an' |

             3   3    2        3     3      2   3 2   3  1
     15.    he brang an' ne man brangs his money to 'im #(p)
     2    3    2         3  1
16.  an' then blow the whistle #(p)

     2   3    2
17.  an' da's wh-|  (p)

     2                             3  2             32
18.  an' when he blow the whistle they (are)'off #(p)
```

Text C

```
         3 2
MG   1.  okay #(p)

          32
     2.  now #(p)

          2
     3.  [a:#](p)

          3
     4.  let's #(p)

          2   2
     5.  sort of #(p)

           2     32
     6.  think again and|  (p)

         2
     7.  an' #(p)

            2
     8.  [a:m#](p)

          2   2
     9.  Michael|  (p)

           3     32
    10.  think about #(p)

           2
    11.  what #(p)
```

2
12. li- | (p)

2 3
13. what yóu # (p)

2 32
14. lìke móst # (p)

2 3 2
15. that Patrícia màkes # (p)

2 21
16. at hóme # (p)

21
17. fóod # (p)

3 21
18. thàt you háve # (p)

3 2
MJ 19. [ó:w #] (p)

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The segmentation of impromptu speech

1 Why is speech segmentation a problem?

The segmentation problem in spoken discourse is particularly acute on the word level: 'In fluent speech there are no physical cues that consistently and reliably indicate where one word ends and the next begins'; '. . . less than 40% of all word boundaries are marked by some physical event' (Cole & Jakimik 1980:138). Since the material we are working with at the Survey of Spoken English, the London-Lund Corpus, has been compiled mainly for grammatical, prosodic and pragmatic studies, the transcription uses institutionalized, orthographic words (except for specific items, word partials, etc.).[1] Fortunately, we can therefore leave the word segmentation problem to our fellow students of speech recognition.

Our segmentation problem is to be found on the syntactic level where the traditional unit 'sentence' is often impossible or, at best, awkward to work with. Crystal has given three reasons why sentence identification and classification is problematic in spoken material: indeterminate connectivity, indeterminate ellipsis and intercalation of structures (1980:155). Clauses and phrases are easier to identify in speech. But one problem here is that we have no grammatical model based on clauses and phrases; another, and a more serious one, is that 'identification' does not seem to be an ambitious enough goal. I would like to take 'segmentation' to mean something like 'a mode of analysis that satisfies reasonable demands for a linguistically adequate model and also reflects the natural units of discourse production, processing and perception'.

This may be too tall an order, but I really see no alternative for the reason that speech is produced, processed and perceived under conditions which are radically different from those of writing and thus bound to result in a different linguistic organisation of information. Hence 'the sentence may not be a practical or even "proper" unit for understanding speech processes' (Weiner & Goodenough 1977:213). So, before discussing possible candidates for a proper unit of speech segmentation, we will consider under what conditions the speech process takes place.

2 A classification of speech events

A typical feature of most spoken discourse is that it permits less planning than written. But speech varies in this and other respects depending on the speech situation. We have classified the texts of the London-Lund Corpus according to five dimensions: dialogue, face-to-face, private, surreptitious recording and radio broadcast. As can be seen in the matrix representation of Figure 1, these five features produce five text groups with eight subgroups. By and large, these groups can be seen as forming a scale from least planned (face-to-face conversation) to most planned speech (public, prepared oration). A classification in terms of the amount of planning that characterizes a speech event has a bearing on the segmentation problem insofar as it is likely to become more difficult the closer we move towards the most-typical-impromptu speech end of the continuum.[2]

The kind of speech that will be discussed here is the most common and typical one, ie informal, impromptu dialogue, as exemplified in a prosodic transcription in Figure 2.

3 How is dialogue produced?

Speakers have to do two things as they talk: first, to determine what to say and what linguistic form to use; second, to deliver these linguistic goods. In dialogue further demands are made on the participants: adhering to unwritten turn-taking rules, processing current speaker's contribution while planning their own, deciding how to say it and then actually say it, attracting the listener's attention and maintaining it by producing comprehensible and worthwhile-listening-to output, eliciting response, and so forth. The structure of discourse is said to be of two kinds (Clark & Clark 1977:236): hierarchical, which is the outgrowth of the speaker's purpose of talking; and local, which is the necessarily serial relation of contributions to a conversation, ie planning ahead is really possible only after the last contribution. This is the reason why

Figure 1. Text classification of the London-Lund Corpus

Text groups		Subgroups	Dialogue	Face-to-face	Private	Surreptitious	Radio	Text labels	Sub-group total	Text group total
Abbreviation	Broad description									
CON	Face-to-face conversation	A	+	+	+	+	–	S.1.1-14, S.2.1-14, S.3.1-6	34	46
		B	+	+	+	–	–	S.4.1-7, S.5.8-11, S.6.2[1]	12	
TEL	Telephone conversation	C	+	–	+	+	–	S7.1-3, S.8.1-4, S.9.1-3[2]	10	10
DIS	Discussion, interview, debate	D	+	+	–	–	+	S.5.1-7, S.6.1, S.6.3-5[3], S.10.8[4]	12	12
PUB	Public, unprepared commentary, demonstration, oration	E	+	+	–	–	–	S.11.1, S.11.4-5	3	12
		F	–	+	–	–	+	S.6.6[5], S.11.3	2	
		G	–	–	–	–	+	S.10.1-7[6]	7	
PRE	Public, prepared oration	H	–	+	–	–	–	S11.2, S.12.1-6[7]	7	7
			Number of "+" texts:						87	87
			71	70	56	44	21			

NOTES TO FIGURE 1

[1] Subgroup B is composite: individual speakers can be marked for surreptitiousness.

[2] S.9.3 is ansaphone calls.

[3] Subtext S.6.4b, which constitutes only a minor part of Text S.6.4, is not a radio recording but a discussion between an ex-nurse and a research worker on a topic similar to that of S.6.4a.

[4] Subtext S.10.8b is not a radio recording. It has been placed in S.10.8 because it is very short, less than 100 tone units. Furthermore, the speaker in S.10.8b is one of the speakers in S.10.8a and both subtexts deal with popular science.

[5] S.6.6 is an interview which, as it turned out, virtually became a monologue.

[6] Subtext S.10.6a is a TV recording. Subtext S.10.7c is not a radio recording (like the main part of Text S.10.7) but a demonstration.

[7] There are two speakers in S.12.3. However, it has been placed in this text group since it is virtually a monologue.

Figure 2: A text sample from the London-Lund Corpus (S.1.1)

A 222 *we |shouldn't*
>B 221 from YÒU■
A 223 and we |shouldn't be im▵posing on you in VAΔCÀTION *▻time■*
224 «there's |no» ΔPÔINT■
B 225 *«well |as its»*
>A 226 |you SĒE■ 227 of of |asking for ▵this particular DÀTE «the» {|first of MÀY■}■ 228 «was [s] that» [ə:m] our ex|ternal EXĀMINER■ · 229 |as well as OUR▵SÉLVES of ▻course■ * · * 230 [ə:] |would be Δfree during TÈRM-▻TIME■ + - +
B 231 *|[m̄]■* 232 +|[mhm̀]■+
>A 233 be |freed ˈby the time term's ÈNDED■ - 234 [ə:m] you're |very kind old SÁM■ - - 235 ˈ|BLÈSS ▻you■ 236 well |that finishes THÀT■ · 237 [ə:m] · «now» |what was the ÒTHER thing {I |wanted to ▵ÀSK ▻you■}■ · 238 |[i] |is · |is it ˈthis YÈAR■ 239 that [ə:] |NÍGHTINGALE ▻goes■ - -
B 240 [ə:] no |NÈXT ▻year■ - -
A 241 [ə:m] · |sixty- [f] *-* four SIXTY-FÌVE■ + · +
B 242 *|SIXTY-FÌVE■* 243 +|YÈAH■+
>A 244 «I thought it was BE|FÒRE» sixty-▻five■ 245 so it's |not until - Δnext year that *the job «will be» ▵ÀDVERTISED■*
B 246 *|January I sup▵pose there* ▵may be an ▵interview round about JÀNUARY■
A 247 |YÈAH■ - 248 [ə:m] |YÓU heard anything {a|bout THÍS■}■ ·
B 249 ˈnothing at ΔÀLL «YÉT»■ - -
A 250 [ə:m] - - you've |not heard ΔPÈEL ▻mentioned {in |this CONNÊXION■}■
B 251 well |NÍGHTINGALE ▻mentioned it {CÀSUALLY to ▻me■}■ 252 that |Peel ΔMÍGHT try FÔR it■ 253 do you know anything |definite «ABÓUT him■»
A 254 |NÒ■ - 255 [ə:] but |[sʌmbp ə] it |may have come from the same ΔSǑURCE a▻gain■
B 256 |well ΔI mentioned it to YÒU■ 257 if you RE|MÉMBER■ 258 *«1 to 2 sylls»*
A 259 *|yes I* ΔKNÒW■ · 260 I know |YǑU did■
B 261 |[mhm̀]■
A 262 [ə:m] I «[riˈmʌ] at |least» NǑW■ 263 I [ə] you |come to MĚNTION it■ 264 I REˈ|MÈMBER that you ▻did■ - 265 [ə] but I |heard it · [ə] mentioned by somebody ÊLSE■ - 266 I |think ΔWÂTT■ - 267 I'm |not SÚRE■ *-* 268 [ə:m] - - |and [ə:m]
B 269 *[m|[hm̀]■*

it is so difficult to carry on a relaxed conversation in a foreign language we do not know well: the privilege of talking time-out for planning your own contribution, which exists in prepared forms of speech and in writing, is just not available in spoken interactive discourse. Since this paper deals with segmentation, it is the local kind of discourse structure that concerns us here, in particular the question in what linguistic form discourse is delivered by the speaker and processed by the listener.

In the psycholinguistic literature it is generally assumed that the local planning unit it is the sentence but that 'the words within a sentence . . . are not planned at once. Speakers appear to work from a skeleton plan of a sentence and select the words roughly constituent by constituent' (Clark & Clark 1977:257). Most of what we know about the execution of speech plans is based on the analysis of speech errors and grammatically incoherent utterances. What these tell us, among other things, is that planning and execution alternate since the speaker cannot plan very far ahead. The speaker 'has a relatively complete, though perhaps sketchy, cognitive structure in mind, but . . . a syntactic form for the whole of this structure has not been formulated berofe the utterance begins' (K. Brown 1980:31).

In some of these areas considerable progress has been made by psycholinguists, who are particularly good at conducting experiments, measuring pauses in microseconds, etc., but often employ crude linguistic analyses and fail to make use of authentic, prosodically analysed utterances.[3]

4 Is there a natural unit of segmentation?

Phoneticians have noted that intonation patterns are structured in terms of the speaker's breathing patterns and recognize the 'breath group' as 'one of the basic, primitive phonetic features that must be present in all languages' (Lieberman 1980:192). Typical features of speech units such as limited variation in length, as compared with units in writing, and patterns of falling fundamental frequency are thus linked with respiratory activity. The breath group is 'a signalling unit that has clear articulatory and acoustic correlates that reflect the presence of neutral mechanisms that govern its production and perception' (Lieberman 1980:198).

Two acoustic features seem to be of special intresse to us here: first, the tendency for the fundamental frequency to drift downward within the breath group at a rate that varies inversely with length, ie the declination is relatively independent of the length of the group; second, final lengthening, ie 'the time per word increases with the length of an utterance and also tends to increase with serial position within the utterance' (Sternberg *et al.* 1980: 518ff.).[4] These features can be taken to provide evidence of cohesion within the prosodic unit and of advance planning.

What phoneticians call 'breath group' has been given many other names, eg 'information unit' by Halliday, 'idea unit' by Chafe, indicating that there is a correlation between the unit of production and the structure of concepts: 'one aspect of the organization of discourse is the distribution of information into sequential information units' (Kroch & Hindle 1981:28); McNeill talks about 'meaning units produced as single outputs' (1979:241); Chafe suggests that idea units are 'linguistic expression of focuses of consciousness' (1980: 15).

5 What is the grammatical structure of the tone unit?

There is, then, considerable support from several quarters for the existence of a natural unit in speech processing and production. We will assume that it corresponds to the 'tone unit'.[5] If the tone unit is a natural, conceptual unit, it should be of interest to know how it is grammatically structured. A close study of authentic speech material will reveal that there is no general, consistent correspondence between grammatical and prosodic units.[6]

In a study of Survey texts (Quirk *et al.* 1964), the tone unit was found to have an average length of 5.3 words, with the highest number of occurrences clustering between 3 and 5 words; 61 per cent of the units had lengths fairly evenly distributed between 2 and 7 words. Chafe's idea units have a mean length of about 2 seconds, or about 6 words each (1980:14). In her contribution to this symposium, Déjean Le Féal states that she found the length of segments consisting of 'phrase sections located between two pauses' to be from 1 to 9 words, – and most of them less than 7 words long – in impromptu speech (compared with segments from 3 to 22 words long in texts read aloud).

Quirk *et al.* found there was considerable correlation between the length of the tone unit and their grammatical content. The major correspondences were found to be as follows (capital letters indicate words carrying nuclei and '//' indicates end of the unit).

Two clauses (8 words):
  I really think that he will come TOMORROW//
One clause (5-6 words):
  he will arrive by train TOMORROW//
Verbal group plus adverbial (4-5 words):
  will arrive at ten THIRTY//
Nominal group as subject (3-4 words):
  the train from LONDON//
Prepositional phrase as adverbial (3-4 words):
  at this PLATFORM//
Miscellaneous nominal groups (2-3 words):
  and the SOUTH//
Adverb (1 word):
  OBVIOUSLY//

The overall impression is that there is indeed correlation between tone units and grammatical units but that it cannot be stated in a simple, general way in terms of constituents, phrases, clauses or sentences. Two examples: we found there was a tendency for inter-unit junctions after clauses operating as post-modifiers in nominal groups:

the man I know// is over there//

and within clauses operating as complements in another clause:

I think this man// will do it//

Although such junctions can no doubt be explained in linguistic terms, we do not at present have enough knowledge of this area to make predictive statements about grammatical/prosodic distributions in general.

The study of correspondences between grammatical and prosodic features reported in Quirk *et al.* (1964) was carried out during the early years of the Survey of English Usage. It was an experiment based on a limited material. We are now in a better position to continue this research: the corpus totals some 435,000 words, it is available on magnetic computer tape and computer facilities are generally much better than in the early sixties. At the Survey of Spoken English we are currently engaged in 'tagging' the corpus grammatically so as to enable us to conduct large-scale studies with the help of a computer.

6 The design of a tagging program

Our tagging is carried out with a computer program that is semiautomatic, interactive and heuristic. The procedure can be described briefly as follows. (For a more detailed and technical description see Svartvik & Eeg-Olofsson, forthcoming.)

In the first part of the tagging program, words are tagged for word-class by a semiautomatic tagging program that assigns word-class labels to all complete words in a text. The current rate of correct automatic tagging produced by this program is about 80 per cent. We make use of a small lexicon containing the 1000 most frequent words in the text at the actual point in the analysis, ie the word types in the lexicon will vary during the analysis and, in the case of multiple tags, the statistically most probable tag will be chosen. In addition to the lexicon, we have a set of suffix and context frame rules. The suffix rules will, for example, tag a word in *-ly* which is not in the lexicon as 'adverb'. The context frame rules are used for the disambiguation of frequent items. Thus *to* will be tagged as 'infinitive' marker when an infinitive follows, otherwise as 'preposition'. The accuracy can no doubt be increasing by adding more and better context frame rules based also on other criteria, such as prosody and position in the tone unit.

The second part of the program is a syntactic phrase parser. All word-class tags are scanned, tone unit by tone unit, and labels assigned to grammatical phrases. There are two features in the design of this program which may be of more general linguistic interest. First, the algorithms are based on word-class tags, not lexical words. Second, the phrase recognition rules are recursively applied in the following order:

(VPH)	Verb phrases
(APH)	Adverb phrases
(JPH)	Adjective phrases
(NPH)	Noun phrases
(PPH)	Prepositional phrases

Third, tone units are analysed from right to left. The decision to use this search order was taken chiefly because it seems easier to identify and isolate phrases in this way as English phrase structure typically has the head to the right and, furthermore, the phrase heads often carry the nucleus. Although this order was adopted for technical reasons rather than in an attempt to simulate human processing, it is of interest to note that psycholinguists are in fact divided in respect of processing direction in human speech. Cf, for example, the statement by Cooper & Paccia-Cooper: 'It is not necessary that words be considered in left-to-right fashion at all computational stages involved in the planning of speech. For example, at an early stage of coding, the speaker may decide on a particular noun phrase without regard to its linear position in the speech output . . .; the experiments do not provide a satisfactory answer to the question of whether left-to-right processing accompanies syntactic stages in *ongoing* speech production. In short, while the phonetic output of speech proceeds in left-to-right fashion by definition, there is still no assurance that left-to-right processing accompanies all of the syntactic stages of coding which occur internally' (1980:198-199).

7 *An algorithm for verb phrase tagging*

The phrase tagging program is designed to provide a basic syntactic description of each tone unit of a text, in the first instance in terms of the five grammatical phrases. For a demonstration of the program design and a description of the technique for parsing one such grammatical unit, this section will outline our analysis of some verb phrases. References will be given to Fig 2 which is an extract from text S.1.1 (TUs 222-269) in Svartvik & Quirk 1980:38. The symbols used for tags, surrounded by round brackets, are listed in Table 1.

Table 1: Tagging symbols for verbs

(V)	VERBS				
	MAIN VERBS (VA)	*BE* (VB)	*DO* (VD)	*HAVE* (VH)	*MODALS* (VM)
(+ϕ)	*speak*	*be*	*do*	*have*	
(+3)	*speaks*	*is*	*does*	*has*	
(+D)	*spoke*		*did*	*had*	
(+N)	*spoken*	*been*	*done*	*had*	
(+G)	*speaking*	*being*	*doing*	*having*	
(+1)		*am*			
(+4)		*are*			
(+5)		*was*			
(+6)		*were*			
(+8)					*can*
(+9)					*could*

CONTRACTIONS (indicated by asterisk), eg:

(VB+3*AN)	*isn't*
(VB+4*AN)	*aren't*
(RC*VB+4)	*you're*
(RA*VH+ϕ)	*I've*
(RA*VB+3)	*he's* (here)
(RA*VH+3)	*he's* (done it)

TU 222: *shouldn't* (VM+9*AN). Such a modal verb on its own, without a head, can be interpreted in several ways: a) a verb phrase fragment, as here (cf TU 223); b) an ellipted structure; c) a partial of a verb phrase which is continued in a following tone unit. A subsequent program will combine such partials in adjacent tone units into verb phrases.

TU 223: *shouldn't* (VM+9*AN) *be* (VB-ϕ) *imposing* (VA+G). This verb string satisfies our description of a complete verb phrase with the structure given by the automatic analysis as (VPH: modal progressive). The procedure is roughly as follows. First the rightmost (V) tag is spotted: (VA+G). Since it is an *-ing* form (+G), the program will search for any form of the verb *be* which progressive (complex) verb phrases are made up of. The search is successful since there is a previous form of *be* (VB) and the combination (progressive) is noted. The next search is for some combination that fits the base form of *be* (VB+ϕ). It is successful since (VM) occurs left of (+ϕ) and the combination (modal) is noted. As a modal can only be the first element of a complex verb phrase, this search run for a complex verb phrase stops here. However, the scan proceeds to the left of (VM) in tone unit 223 in quest of another (V) which may constitute a new verb phrase. Since none is found, the verb phrase search for this tone unit stops and moves on to tone unit 224, starting from right to left, looking for a (V) . . .

TU 224: *'s* (VB+3). Since this verb phrase occurs in a stretch of transcription marked << >> (denoting subaudibility), it has not been analysed.

TU 225: also skipped because of subaudibility.

TU 226: *see* (VA+ϕ). Analysis: (VPH: present).

TU 223: *asking* (VA+G). Analysis: (VPH: ing), ie non-finite verb phrase consisting of present participle; which, in this case, will subsequently become part of a prepositional phrase.

TU 228: skipped because of subaudibility.

TU 229: skipped because no (V) in tone unit.

TU 230: *would* (VM+9) *be* (VB+ϕ). Analysis: (VPH: modal). Note that different functions of *be* are not marked in the word-class analysis, but all are (VB). One reason is of course that it is desirable to have a tagging system that is fully automatic on the word-class level, and functional differentation is therefore deferred until the phrase analysis stage. Unless *be* in TU 230 combines with another partial verb phrase in the text tone unit of speaker A, *be* in the verb phrase of TU 230 will be analysed as a copula.

TU 223: *'s* (VB+3) *ended* (VA+D,N). Analysis: (VPH: passive); *be* (VB+ϕ) *freed* (VA+D,N). Analysis: (VPH: passive). Both verb phrases are passive (but, for the rightmost, a better analysis would be for the program to propose alternatives (VPH: passive/perfective)). Failure to link the leftmost verb phrase *be freed* to the previous verb phrase contribution by speaker A, *would be* in TU 230 answers the query raised above. No complex verb phrase combination of (VB+ϕ) in TU 230 and (VB+ϕ) in TU 233 exists in

English grammar, hence *be* in TU 230 will be taken as a copula, not an aspectual auxiliary.

Figure 3 gives some examples of the output from a preliminary run of the verb phrase tagging program.

8 Summing up

The main purpose of the program outlined here is to give us information about the relation between grammar and prosody in large amounts of data representing different types of spoken English. The insights gathered from this analysis should help to answer some of the questions raised at the beginning of this paper by improving our understanding of how human speech is processed and thus enable us to produce better grammatical descriptions for spoken language.

The program can, in principle, be used also for grammatical analysis of written language and we are planning to make use of this facility in a future comparison between speech and writing.

We also hope that our work will make a contribution to the methodology of computational linguistics in that we will learn more about how far morphological syntactic analyses can be made automatic.

ACKNOWLEDGEMENTS

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Figure 3: Examples of output from the verb phrase tagging program (Explanations of symbols used are given in Svartvik & Quirk 1980:21.)

```
TU 993   /you you /turn 'left and im:mediately RIGHT a'gain//
         VPH:present = turn(VA+0)

TU 884   there was an /old 'old WAY down 'onto that ROAD//
         VPH:past = was(VB+5)

TU 836    I should /think you'd A:LLOW two and a HALF//
         VPH:modal = should(VM+9) think(VA+0)
         VPH:modal = 'd(VM+9) allow(VA+0)

TU 957   /well !Frank's !practically never 'done it by :ROAD
         VPH:perfect = 's(VH+3) done(VD+N)

TU 989   /JO doesn't 'like 'this BIT//
         VPH:do-support = doesn't(VD+3) like(VA+0)

TU 994   in /order to 'go 'through !FARNHAM//
         VPH:infinitive = go(VA+0)

TU 627   /and then !digging TRENCHES//
         VPH:-ing form = digging (VA+G)

TU 528   /what WAS it 'called//
         VPH:passive = was(VB+5) called(VA+N)

TU 863   /if one's :coming up 'through :CROYDON//
         VPH:progressive = 's(VB+3) co ing(VA+G)

TU 927   /London would be worth going !THROUGH//
         VPH:modal = would(VM+9) be(VB+0)
         VPH:-ing form = going(VA+G)

TU 941   he's /been RE:SEARCHING it//
         VPH:perfective progressive = 's(VH+3) been(VB+N)
         researching VA+G)
TU 617   it /really would have been :much more DISASTROUS//
         VPH:modal perfective = would(VM+9) have(VH+0) been(VB+N)
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[1] The London-Lund Corpus consists of 87 'texts' with origin in speech that have been recorded and transcribed at the Survey of English Usage, University College London and computerized at the Survey of Spoken English, University of Lund. For a description of the corpus, see Svartvik & Quirk (1980).

[2] One feature related to planning is speed of production. It is estimated that the average speed of spoken English is about 180 words per minute and that hand-writing is slower than one-tenth the speed of speaking (Chafe, forthcoming: 4).

[3] However, some psychologists are beginning to realize the value of large data bases: "there is a problem ... of securing a corpus of data that is truly adequate to test conclusions decisively". "Clearly, the ultimate solution ... must be to automate the processing of long streams of speech, so as to detect ungrammaticality automatically, and thereby enlarge the sample of syntactic errors to hundreds or thousands of examples instead of a handful ... The syntactic analysis would not have to be exact – it must simply beneficiate the raw ore so that human experts could afford to search through the enriched samples" (Simon 1980: 543-544).

[4] Lengthening towards the end of the tone unit may also have a bearing on theme/rheme organization within the tone unit (see, for example, Kroch & Hindle 1981), but this point will not be further pursued here.

[5] For a definition of 'tone unit', see Crystal 1969:204ff. Linguists generally agree on the identification of tone units. Quirk & Crystal (1966) also report 84.8 per cent agreement on tone unit identification among 46 informants untrained in prosodic analysis. However, Brown *et al.* report difficulty with consistently identifying tone groups by intonational criteria but recognize 'pause-defined units' (1980:20). Chafe uses three criteria: intonation, pausing, and syntax (1980:14).

[6] Cf McNeill: 'the unit of speech programming is not a grammatical constituent in many utterances. This is not without theoretical interest. The performance device in these utterances cannot be said to have more than *weak equivalence* with the grammatical description ... and not, as widely assumed ... a strong equivalence ...' (1979:250).

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The symbiotic relationship between pragmatic particles and impromptu speech

Abstract. Pragmatic particles are given a universal prototype definition on the basis of structural and functional criteria. A distinction is made between core and peripheral pragmatic particles. Impromptu speech is not restricted to the spoken medium. The concept is given a multidimensional characterization in terms of situational variables, interactive discourse parameters, and manner of grammatical realization. Notions like deviance and norm are reinterpreted with respect to these different levels. Impromptu speech and pragmatic particles are found to be influenced by the same socio-psychological causes: planning and politeness. Impromptu speech and pragmatic particles also show a close relationship on the surface: this relationship is investigated in terms of implicational relations of cooccurrence. Using a biological metaphor, the close relationship between impromptu speech and pragmatic particles is characterized as a symbiotic relationship.

1. Introduction

The starting point for the present paper is the often attested fact that PRAGMATIC PARTICLES like *you know, I guess*, and *man* mostly occur in IMPROMPTU SPEECH, i.e., in spontaneous, every-day face-to-face interaction. In fact, the very object of the study is to discuss this special relationship between pragmatic particles and impromptu speech in some detail. If pragmatic particles occur most often in impromptu speech, then, by scrutinizing the whole notion of impromptu speech, we will also get important insights into the functions of pragmatic particles in language.

The task of pragmatic particles in language can be investigated from different points of view; most importantly, we can distinguish between a WHAT question, and a WHY question. The former will focus on the structure of language, and seeks to explain the pragmatic particle phenomenon with respect to linguistic units and hierarchies, as well as with respect to the task of pragmatic particles in narrative and turn-taking structures. The WHY perspective concentrates more on discourse-functional aspects of language, and will attempt to answer the question via an investigation into the cognitive and interactional behaviour of human beings.

For general linguistic purposes, both of these perspectives are of course equally relevant.

In a more general sense, the paper also attempts to shed some light on what a universal characterization of pragmatic particles might look like. Such a universalist approach to pragmatic particles may need some clarifications: functionally, pragmatic particles as a group are viewed as performing the same functions irrespective of specific language; and structurally, I want to argue (a) that there is a similarity between their surface-linguistic features in different languages, and (b) that one particle or set of particles in one language might have a functionally corresponding particle or set of particles (not necessarily in one-to-one correspondence group-internally) in another language. This suggests the methodological possibility (c) that each pragmatic particle has a prototype meaning or function of its own, a function that is independent of, and that can be extracted from, its occurrence in whatever medium or register. This, again, would imply that a prototypical characterization of pragmatic particles can be arrived at without explicit reference to, say, impromptu speech. However, in our search for such a characterization for each pragmatic particle, the prototypical whereabouts of pragmatic particles, viz. impromptu speech, will at the same time receive a deeper understanding.

We accordingly find that by looking at impromptu speech we will learn about pragmatic particles, and by looking at pragmatic particles we will learn about impromptu speech. And this is of course the way natural language works: things interrelate; and they affect and define each other, simultaneously.

It does not, however, follow that, because pragmatic particles and impromptu speech do in fact interrelate considerably, their relationship should necessarily be a simple one. As I hope to show below, they are at the same time independent of each other as they show superficial dependency; and they are both partly effects of deeper, mutual causes which functionally connect them.

*

In section 2. I will suggest a prototypical definition of pragmatic particles; in section 3. a similar endeavour is undertaken with respect to impromptu speech. In section 4. I will discuss the social and cognitive causes for the two phenomena, and in section 5. the close relationship – on the surface – between pragmatic particles and impromptu speech is illustrated. The concluding section will employ a biological metaphor to characterize their relationship.

2. *A universal characterization of pragmatic particles.*[1]

In accordance with the universal perspective suggested in section 1., I will start by distinguishing between a structural (WHAT) and a functional (WHY) approach to pragmatic particles.

2.1. The structural approach takes a language-internal perspective, and is closely associated with attempts to set up and define word classes or parts of speech. Thus, we might set as our task to isolate a sub-class of pragmatic particles within the more general class of non-inflected particles (in the traditional sense of this term: adverbs, conjunctions, prepositions, interjections, etc.).

Typically, a pragmatic particle would be (a) short, and (b) prosodically subordinated to another word. It would (c) resist clear lexical specification and be propositionally empty (i.e., it would not be part of the propositional content of the sentence). Furthermore, it would (d) tend to occur in some sense cut off from, or on a higher level than, the rest of the utterance, at the same time as it tends to modify that utterance as a whole.

Perhaps these criteria alone will satisfy some readers as a characterization of a potential part-of-speech class of pragmatic particles. However, when we attempt to apply these criteria in practice, problems emerge. Firstly, some of these criteria are very idiosyncratic in comparison to existing word-class criteria. This is especially the case with the specification of item length.

Secondly, we will encounter problems of delimitation: a formally defined class of pragmatic particles will overlap with other classes, notably with other sub-classes of the traditional class of particles (cf. 2.3.).

Thirdly, there are elements in language that seem to function in the same way as pragmatic particles, but whose structural make-up does not conform to all of the criteria given above. (Most of these will, however, turn out to be peripheral pragmatic particles; cf. 2.3.)

Perhaps we could weigh criteria (a) - (d) above, and ascribe more importance to some than to others. In that case the propositional-emptiness criterion will no doubt prove to be more important than the others. However, propositional emptiness is also a relative concept. All of this suggests that we have to define pragmatic particles structurally as a prototype concept, with criteria (a) - (d) as the relevant parameters in the prototype.

Still, if we look at the criteria above, we find that they are mentioned in the order of, if you like, from surface to deep. And the deeper you get, the more obligatory the criteria get; cf. (c) and (d). But at the same time, the deeper you get, the further you also get from purely structural characterizations, and the closer you come to the functional perspective of WHY pragmatic particles are used in language.

The word-class approach – in its traditional sense – does not seem to be able to take us very far. Still, a recent approach to these issues turns out to be methodologically very similar to the traditional word-class approach. I have in mind research within the ethnomethodology of speaking, where the structural turn-taking systems are discourse-level structures, but still very much rely on actually occurring surface-structure organization. Within this system pragmatic particles are often being classified on, e.g., positional grounds, and we find sub-classes like post-completers, and prestarters (Sacks *et al.* 1974).[2] Similarly, in structural approaches to narratology, pragmatic particles can be classified as episode markers, organizers, or connectives.

We notice, then, that there are two kinds of architectures that pragmatic particles can assist in building up: a clausal one and a textual one. If, say, a pragmatic particle like *I guess* is used in an utterance to qualify the speaker's certainty towards his statement, this particle focuses on clause-level architecture. On a textual level, pragmatic particles focus on the relation of one utterance/text/turn to another. In conversations we have turn-taking signals (*oh, well*), in narratives we get episode markers (e.g. the pragmatic use of *anyway*), and connectives (e.g., conjunctions used pragmatically). The two kinds of architectures are presented schematically in Fig. 1.

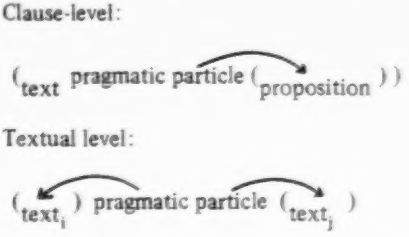
Clause-level:
(text pragmatic particle (proposition))
Textual level:
(texti) pragmatic particle (textj)

Fig. 1. The clause-level and textual qualifications of pragmatic particles.

2.2. As we turn to the pragmatic, or functional aspect of pragmatic particles, we no longer look at language as a structural entity; rather, we look at language from the point of view of how it relates to other areas of human behaviour. We can thus start by comparing the functions of pragmatic particles to other linguistic and non-linguistic means for communicating pragmatic information.

It has often been pointed out that pragmatic particles share a number of characteristics with certain aspects of prosody. Most often this comparison has been made across languages (cf. Schubiger 1965, 1980, Kriwonossow 1977, Weydt 1979, Östman 1979), but the similarity in function is naturally also present within one language. In particular, the similarity between pragmatic particles and paralinguistic features has been noted in Schubiger 1965; Abercrombie's (1967) distinction between speech melody, and vocal gesture used as an affective index, is also relevant here. And from vocal gesture to non-vocal there is but a short step.

Going in another direction, we can note the similarity between pragmatic particles and modals, and the pragmatic functions of tense and aspect, word order, passivization, etc.

What, then, do pragmatic particles have in common with these other phenomena? Three aspects, I would like to argue: anchoring, implicitness, and expressiveness. An expressive element of language communicates the emotions and attitudes of the speaker, and by so doing, establishes a connection with the addressee. Pragmatic particles, prosody, gestures, and certain grammatical devices implicitly anchor the act of communication to the speaker's attitudes towards aspects of the on-going interaction. This phenomenon is what I have elsewehere discussed as IMPLICIT ANCHORAGE (cf. Östman 1981). Implicit anchorage constitutes a multidimensional conceptual field, whose linguistic manifestations include pragmatic particles.

A functional characterization of pragmatic particles would thus involve relating it to the field of implicit anchorage. A pragmatic particle can now be defined as an element of language that formally satisfies (at least some of) the criteria discussed under 2.1., and that functionally is a manifestation of implicit anchorage.

I mentioned that pragmatic particles have two types of architectural tasks, a clausal one and a textual one. On the functional side pragmatic particles also perform two types of tasks: an interactional and an attitudinal task. The interactional functions of pragmatic particles are either sociological in nature, e.g. group identificatory (sex, age, ethnicity; cf. the use of *you know, like*, and *man*), or they are discourse-functional (e.g. *you know*) and give important cues in the on-going interaction (the implied functional side of the ethnomethodological approach). The attitudinal functions of pragmatic particles focus on cognitive and psychological aspects, and are realized e.g. as evaluative markers and expletives (cf. the pragmatic use of *fuck* and *shit*). (Reflex--interjective elements like *ouch*, and sound effects like *booing* are not regarded as pragmatic particles.)

In their functional use pragmatic particles are not restricted as to their position in a discourse; they can be dispersed throughout the text (cf. the evaluative elements in narratives, as discussed in Labov 1972).

2.3. In the preceding sections I have differentiated between two structural and two functional aspects of pragmatic particles. Notice that these aspects do not constitute a sub-classification of pragmatic particles. All pragmatic particles potentially rely on all of these aspects in discourse. And this is why we do not talk about clausal, textual, attitudinal, or interactional pragmatic particles as a separate sub-classes.

It is true, however, that the pragmatic particles both can have, and do have, any one (or several) of these aspects IN FOCUS. For instance, *I guess* has the clausal aspect in focus (cf. its close relation to the epistemic – and peripheral, cf. below – particles *I suppose*, and *I believe*). *You know*, on the other hand, has the interactional aspect in focus, but it also has an important textual usage.

It should be obvious that both the structural and the functional perspectives are necessary for an overall characterization of pragmatic particles. Without the functional characterization pragmatic particles would be reduced to little more than an extremely-hard-to-define word-class; without the structural delimitation pragmatic particles could not be distinguished from implicit anchoring performed by gestural or prosodic means, nor from any verbal element (phrase, utterance, text) that on a particular occasion happens to have an expressive function.

There is, however, one further criterion that has to be added to the ones already discussed. We need a 'uniqueness' criterion for the pragmatic particles. With this in mind we can suggest as the ultimate delimiting criteria for calling a linguistic unit a prototypical pragmatic particle (a) that this unit does not directly partake in the propositional content of an utterance; and (b) that it has as its SOLE FUNCTION to implicitly anchor that propositional content.

Sole function here means that for an item to be called a pragmatic particle, it should never be able to have any other than a pragmatic-particle function; it is always an instance of the class of pragmatic particles independent of where it occurs. Two clarifications are in need at this point.

a. This definition of pragmatic particles will exclude from the CORE class of pragmatic particles such expressions as can (but need not always) have a pragmatic-particle function (e.g., aspectual particles like *just*), and whose pragmatic-particle function is not clearly delimited from its propositional meaning. Such particles can be called PERIPHERAL members of the class of pragmatic particles. Other examples of peripheral pragmatic particles would be: aspectual particles: *now, too*; hedges: *kinda*; conjunctive particles: *but*; modal particles: *I suppose, maybe*; etc. (cf. Östman, forthcoming, for a tentative list and classification).

b. The core, or prototypical pragmatic particles can still have homonyms which have a clear propositional content. But in this case the pragmatic and propositional functions are clearly separate in nature, with no scalar relation between the two. This status of homonymity is basically what is being made use of in a joke like the following

(1) A: You know, yesterday I really enjoyed myself!
B: No I don't, actually.

(In this connection we can also mention a possible distinction between what we could call – following a suggestion by Jaakko Lehtonen – communicative vs. informative pragmatic particles. The main function of the latter would be to transmit (unintentional) information about the speaker rather than to partake in the communicative interaction as such. However, these are different functions that the same verbal elements can perform, and the distinction between them will very often be of a gradient nature.)

On the basis of the suggestions in the previous paragraphs, we can characterize the class of pragmatic particles as a pseudo-open class: the core members are relatively few (at least the following: *I mean, you know, like, well, oh, ah, uh, say, blood, man, I guess*), but pragmatic-particleness is 'peripherally' dispersed in various directions.

3. Impromptu speech.[3]

3.1. When characterizing impromptu speech, it is methodologically important to realize that this notion can be approached from different directions. Impromptu speech is a discourse type whose core feature is that it characterizes on-the-spot-created language[4] that is to be processed in real time; the prototypical instance being spontaneous, every-day face-to-face interaction. This means that a characterization of impromptu speech will have to focus more on the cognitive and interactional processes involved, than on the ultimate linguistic product. Impromptu speech is, in this view, a different system of INTERACTION than, say, expository prose, on which grammatical descriptions of particular languages are often based. And impromptu language will accordingly conform to a grammar of its own. Impromptu speech is not, however, a separate LINGUISTIC system: there can be more or less impromtuness in any discourse, and the relation between prototypical impromptu speech and prototypical non-impromptu speech is that of a linguistic gradience.

The concept of impromptu speech should not be restricted to instances of spoken discourse, as the label may suggest, nor should we a priori discard as non-impromptu speech instances of language that (more or less efficiently) SIMULATE on-the-spot-created language. After all, we do recognize impromptu-speech simulations as impromptu speech, in relation to other (present or potential) types of discourse; they may be idealizations of real-time language ('displaced impromptu speech'), but once we realize that this is the case, they can just as much assist the impromptu-speech researcher, as they can (and inevitably do at times) obstruct his investigations.

We can also recognize different extents of displacedness with respect to authentic impromptu speech. Each of the following 'idealizations' stresses different aspects of the artificiality of any strict delimitation of impromptu speech with respect to medium and authenticity.

i. Transcriptions of impromptu speech.
ii. Insincere impromptu performances. E.g., a political discussion with memorized impromptu turns, especially replies.
iii. What I have elsewhere called INTERACTIONAL WRITING: impromptu conversations carried on in writing (cf. Östman MS2).
iv. Simulation of impromptu speech in drama or fiction. This is perhaps the clearest instance of intentional simulation. However, as I have shown in Östman, forthcoming, simple simulation or replication of authentic discourse is just one of the uses of fictional impromptu speech.

3.2. Impromptu speech is not something that is definable once and for all in a vacuum. Impromptu speech is a bundle-concept. A particular instance of impromptu speech will look different (in its syntactic and textual organization) depending on the values-at-hand of the following situational parameters:

- the CONTEXT-OF-SITUATION (cf. Firth 1935, and modifications in Östman 1978): the linguistic frame (cf. Fillmore 1977) and its relevant participants, their roles, number and sex, together with temporally and spatially relevant objects.

- the MEDIUM: spoken, written, telecommunication. Notice that writing cannot simply be regarded as secondary to and derivative of speaking.
- the TOPIC, or subject-matter of the discourse, including the possibly predetermined structure, stylistic boundedness, of a text, and participants' general PREPAREDNESS with respect to this topic. (Cf. Nils Erik Enkvist's paper in the present volume.) The latter, preparedness, is what Chafe (1979) calls planned[5] discourse. Chafe regards preparedness and medium as the basic parameters in his research on the difference between spoken and written discourse. The prototypical types of discourse that Chafe has chosen for each slot in his two-dimensional grid are given in Fig. 2.[6]

	PLANNED	UNPLANNED
SPOKEN	lecture	conversation
WRITTEN	scientific article	letter

Fig. 2.

In this approach, situation A involving medium X and topic Y will manifest a different kind of impromptu speech than situation B in medium Z, concerning topic W. Still, both would be prototypical instances of impromptu speech.

In the same way as we can distinguish between interactive and linguistic systems (cf. 3.1.), we should also differentiate between linguistic and interactive (or pragmatic) NORMS with respect to impromptu speech. That is, from an interactive point of view we can use the label 'norm' for prototypical instances of impromptu speech with respect to the situational variables mentioned above. As we noted in 3.1., the interactive system of impromptu speech has its own rules and pragmatic organization.

In a linguistic sense we can talk about norms (or rules, or tendencies) from the point of view of a common-core approach to language variety. And in this sense we can also talk about impromptu speech as being grammatically FRAGMENTED (cf. Chafe 1979: fragmentation; cf. also 3.3.) and often syntactically DEVIANT in relation to non-impromptu, common-core language.

Notice in this connection that Grice's (1975) Cooperative Principle and its maxims are not interactive norms. Rather, they constitute the norms for how non-impromptu speech should be used – if it ever is used. Thus, when we talk about 'violations of, or deviations from, the Gricean maxims', such violations may be realized as grammatical deviance, but interactively the state of affairs may, and very often will, remain normal (cf. also section 5.).

3.3. The preceding sections were concerned with the essence of impromptu speech. But, as pointed out in 3.1., impromptu speech has to be approached with different perspectives. One very important perspective is the question of how impromptuness is linguistically manifested in a discourse.

It has been noted, for instance, that impromptu speech – due to cognitive and interactive constraints – is generally characterized by a 'looser' or more fragmented structure (both syntactically and textually) than non-impromptu speech: coordinations rather than embeddings, syntactic simplifications due to focus on content rather than expression, redundancy, etc.

The values of the parameters of context-of-situation, medium, and topic tendentially (i.e. probabilistically) suggest whether a piece of discourse is, or is not, potentially impromptu; we could call this a STYLISTIC or SITUATIONAL determination. But on a different level, let us call it the REGISTER[7] level, we can distinguish a number of variables that determine the actual degree of impromptuness for any given discourse, in any given type of situation. These variables (or, rather, what I take to be these variables) have been extensively discussed by Robin T. Lakoff, forthcoming – from a somewhat different point of view, viz., as dimensions of spoken and written discourse.

Lakoff sets up a gradience with two end-points: the oral dyad as one end-pole, and expository prose as the other. A set of variables determines whether a piece of text is closer to one or the other of the end-poles, or whether it lies somewhere in the middle on this gradient scale. In this system discourse types like telephone conversation, lecture, and letter show different prototypical feature combinations vis-à-vis these parameters. Fig. 3 is an adaptation from Lakoff (forthcoming).[8]

The variables to the left in Fig. 3. determine the degree of impromptuness of a discourse: visibility; reciprocity ("interchangeability of roles"); informality (non-ceremonial); spontaneity (unplanned, feedback); empathy (communication as a joint endeavour, back-channel responses); and inconsequentiality (no import beyond immediate context of discourse). Impromptuness corresponds to 'plus' features. Thus, the most impromptuness will be found to the left in Fig. 3.: the more a particular type of discourse approaches the oral-dyad end-point, the more impromptu it will be.

	oral-dyad	telephone	lecture	letter	prose
visibility	+	–	+	–	–
reciprocity	+	+	–	+	–
informality	+	+	–	+/–	–
spontaneity	+	+	–	–	–
empathy	+	+	+	–	–
inconsequentiality	+	+	+	+/–	–

Fig. 3.

The plus and minus in Fig. 3. can be read as facilitating vs. obstructing the occurrence of syntactically deviant structures, respectively. But perceptually, the presence of visibility, spontaneity, etc. will of course facilitate mutual understanding between the participants.

A somewhat similar approach to this general field of research can be found in Wallace L. Chafe's (1979) recent discussions. Chafe sets up a gradience DETACHMENT- INVOLVEMENT, which parallels, basically, the minus - plus distinction, respectively, of Fig. 3. But Chafe also makes a gradient distinction in terms of the linguistic aspects of the product; between FRAGMENTATION ('loose' structure) and INTEGRATION ('tight' and non-redundant structure). Furthermore, Chafe argues that each text can be characterized by plotting it onto the area that emerges when these two scales are made to cross one another, as in Fig. 4. Given a particular text, a number of linguistic parameters are isolated (the use of conjunctions, hedges, hesitations, certain syntactic structures, etc.) and are given a frequency value for that text. The added values of the parameters for the whole text with respect to the axes in Fig. 4. will ensure this text a specific place in one of the fields of the figure (e.g. Text A in the upper right-hand field).

From a strictly theoretical point of view the axes seem to represent different ways of looking at the same phenomenon. The x-axis in Fig. 4.is concerned with functional, cognitive, and causal notions; the y-axis with structural, verbal, and resultative notions. However, there are also good reasons for keeping them distinct, as a heuristic device. For instance, they shed an important light on useful discourse-type distinctions; and a further reason for keeping them apart will be illustrated in section 4.

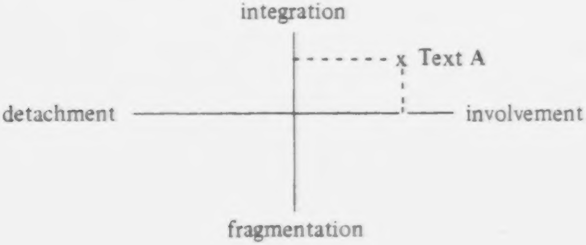

Fig. 4.

In Chafe's system syntactic deviance will be more probable to occur in texts with a high value of fragmentation; and involvement relates (in the same way as Lakoff's variables) to perceptual easiness of understanding a discourse. (This, too, can be seen as an argument for keeping Chafe's axes apart.)

3.4. The discussion above has shown that a notion like impromptu speech is, to say the least, amoebic, and that in order to arrive at an over-all picture, we have to approach impromptu speech from different perspectives simultaneously.

We can end the discussion of impromptu speech with a schematic figure – Fig. 5. – of the different aspects that have to be taken into account in characterizing impromptu speech.

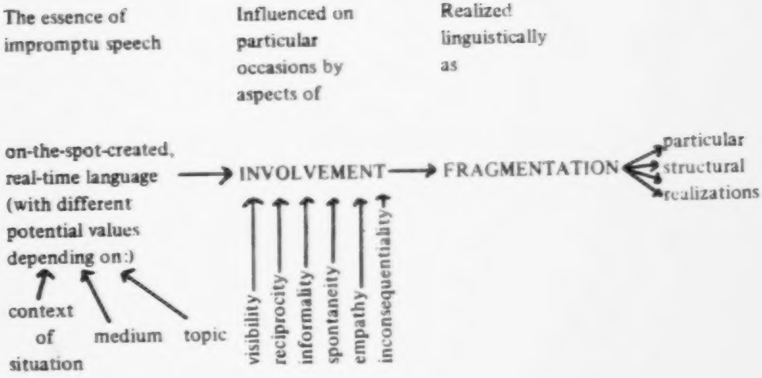
The essence of impromptu speech
Influenced on particular occasions by aspects of
Realized linguistically as
on-the-spot-created, real-time language (with different potential values depending on:)
context of situation
medium
topic
INVOLVEMENT
FRAGMENTATION
particular structural realizations
visibility
reciprocity
informality
spontaneity
empathy
inconsequentiality

Fig. 5.
The interrelation between the different aspects that partake in the characterization of impromptu speech.

4. *The socio-psychological functions of pragmatic particles and impromptu speech.*

4.1. In the characterization of pragmatic particles in section 2. no (explicit) reference was made to impromptu speech. And similarly, we did not need to mention pragmatic particles when we discussed the characteristics of impromptu speech. Nevertheless, it is true that pragmatic particles occur very frequently in spontaneous, face-to-face interaction.

I now want to look at the interrelationship between pragmatic particles and impromptu speech in more detail. In this section I will discuss the underlying reason for this intricate relationship. When we deal with matters that are specifically related to actual language USAGE, like pragmatic particles and impromptu speech, it is important not to forget the point of view of general human behaviour. What we need to investigate in pragmatic discussions are, on top of internal linguistic causes and cooccurrences, the socio-psychological causes and processes that lie behind the resulting communicative (especially linguistic) output.

Whereas this section will thus be a discussion in terms of functional causality, section 5. will concentrate on linguistic issues of causality: whether the occurrence of one of these phenomena, pragmatic particles and impromptu speech, is dependent on the occurrence of the other; that is, whether there is, after all, some implicational relation between the two.

*

In characterizing pragmatic particles and impromptu speech (in 2. and 3.) we found

a. that a description of pragmatic particles in terms of autonomous grammar is not enough, and that functional aspects – socially and psychologically underlying causes – have to be adhered to; and

b. that impromptu speech is not a clearly defined entity, but a bundle-concept, which can be appropriately characterized only by reference to a number of variables on different levels.

Below I will be claiming that the underlying factors that produce both pragmatic particles and impromptu speech are of a similar nature.

There are two basic aspects that govern both the occurrence of pragmatic particles in discourse, and the impromptu nature of certain speech situations and discourse-types: PLANNING and POLITENESS. The former is speaker-oriented and directly affects both the content and the form of the resulting utterance; the latter is interaction-oriented, and its effects (both on content and form) can be seen as being more indirect accomplishments, or secondary-level modifications, from a behavioural point of view.

4.2. Planning in the present sense should be distinguished from what we called preparedness in section 3. The latter is a more general notion which relates to the speaker's general state of mind in the situation at hand. (With respect to a certain situation or topic the speaker might for instance have some prior idea of what aspects are to be discussed and in what order.) The former notion, planning, is here used in a more local sense: the (psychological, not physical) problems the speaker has with grammatical planning, of both content and form.

The fact that impromptu speech is characteristically connected with real-time processing does not by itself make time a causal notion for impromptu speech. Rather, time can be seen as a circumstantial aspect that makes planning take the linguistic and interactional form it does. To put it in a rather extreme way: we would have to plan even if there were no time, but the fact that time exists makes us plan the way we do: the more time we have, the more planning can be undertaken, the less time, the less planning, and the less planning, the more impromptu.

Thus planning, or rather, the interaction between planning and time can be seen to be a more important factor for impromptu speech than time alone.

Pragmatic particles appear in discourse as a reflection of planning. The speaker can, of course, plan his utterances silently (as linguistically revealed through pauses),[9] but to ensure that his pauses are not mistaken for 'transition-relevance places', he can hold the floor by using the appropriate pragmatic particle (note the use of labels like 'hesitation markers', and 'pause-fillers'): *you know, I mean, well, like, uh,* etc. As has been shown in a number of studies, the use of each of these pragmatic particles is governed by rules, and there are reasons for using one pragmatic particle rather than any other (cf. James 1973; R. Lakoff 1973; Östman 1981). In Chafe's terms, their occurrence indicates fragmentation of the text. (The planning-hesitation function of pragmatic particles has mainly to do with their structural aspects; cf. 2.1.)

Thus, planning shows up both as an underlying factor governing impromptu speech, and as one of the reasons for using a pragmatic particle in a discourse. Fig. 6. shows the effects of planning.

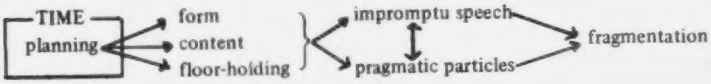

Fig. 6.

4.3. Politeness is the other important factor in discourse that produces pragmatic particles and impromptu speech. Whereas planning focuses on the cognitive aspects of human linguistic behaviour, politeness is an interactive and social notion. (The term politeness is here used in a general sense, including, rather than being in opposition to, notions like rudeness.)

There are two interrelated aspects that have to do with politeness. The first is the dichotomy between POWER and SOLIDARITY (or I vs. WE): the two counterbalancing forces that tend to restrict the behaviour of a speaker to what is socially and situationally acceptable, while at the same time allowing him to save face in the presence of his interlocutor(s) (cf. the discussion of face-saving and politeness in Östman 1981).

The second aspect constitutes the different politeness strategies any of which a speaker can choose to follow in an interaction: CLARITY (impersonal), DISTANCE (formal politeness: designed to impute authority), DEFERENCE ('Don't impose – give options'), CAMARADERIE ('Show sympathy') (cf. R. Lakoff 1979).

At the level of clarity Grice's maxims are operative, and it is agreed that transmission of information is the sole enterprise of the interaction, seemingly setting aside issues of power and solidarity. Of course, these issues are not as such neglected, it is only their socially preferable parallel existence that is overlooked, and the aspect of power is let loose without constraints.

At the opposite end of R. Lakoff's hierarchy of politeness strategies we have camaraderie. Here too, the power-solidarity opposition is ideally not operative, but a one-sided focus on solidarity is typical. In an extreme version of camaraderie the Gricean maxims also become operative: there is no social need for the participants to use strategies that do not conform to the Gricean maxims. Their amount of shared knowledge is at a maximum.[10]

When the Gricean maxims do not apply, the aspects of power and solidarity are simultaneously operative – as they should be. In these non--extreme, 'normal' situations, and especially at the levels of distance and deference, conversational INDIRECTNESS (R. Lakoff 1980) will show up in the discourse. Conversational indirectness is employed as a strategy to mitigate the effect of an utterance, and thus to avoid confrontation. Linguistically such confrontation avoidance is typically realized as discourse-regulating hedginess. And pragmatic particles play a salient role in the linguistic field of hedges.

A speaker's indirectness strategy gives the resultant text a feeling of impromptu.[11] And indirectness shows up in the use of hedges and pragmatic particles. (This is mainly an instance of the functional aspect of pragmatic particles, cf. 2.2., where features of involvement and reciprocity are in the foreground.)

Whereas planning is more paradigmatically oriented (choice of content or word-form), politeness has a syntagmatic orientation: elements have to be checked, and monitored for the sake of the addressee – both before they are, and after they have been, temporally emitted.

Fig. 7. is a schematic representation of the causal effect of politeness. Notice that the end-result here is involvement, whereas in Fig. 6. it was fragmentation; this, again, speaks in favour of keeping Chafe's axes apart.

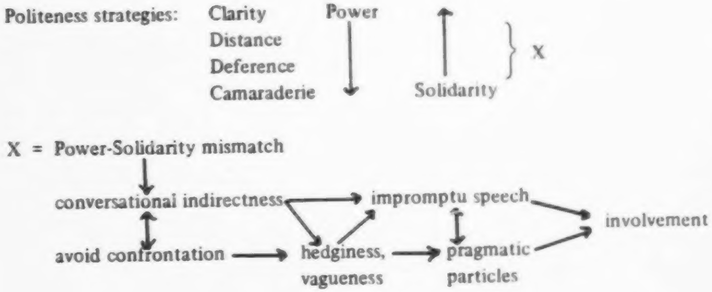
Politeness strategies:
Clarity
Distance
Deference
Camaraderie
Power
Solidarity
X
X = Power-Solidarity mismatch
conversational indirectness
impromptu speech
involvement
avoid confrontation
hedginess, vagueness
pragmatic particles

Fig. 7.

*

In this section I have shown that the relation between pragmatic particles and impromptu speech is deeper than what has usually been thought. In a sense, pragmatic particles and impromptu speech are effects of the same causes. This is of course an oversimplified statement, since the two are not parallel phenomena, but one occurs as part of the other. However, the primary reason why we use pragmatic particles is not the impromptu nature of the discourse as such, but that the kind of discourse we might expect to find pragmatic particles in is itself typical of the social situations where the need for pragmatic particles is the greatest.

But even though pragmatic particles and impromptu speech might be regarded as effects of similar causes, they do not simply occur side by side; as will be evident from the discussion in the next section, they very closely interact in making a message interpretable in the way the speaker intended.

5. The surface interaction between pragmatic particles and impromptu speech.

In the preceding sections we have seen that pragmatic particles and impromptu speech have, to employ a botanic metaphor, a common root, but that they still are different plants on the surface. In this section I want to discuss the very intricate surface relations between impromptu speech and pragmatic particles. The discussion will be in terms of cooccurrence (in-)-dependencies: is their an implicational relation between an occurrence of a pragmatic particle and the impromptuness of the discourse?

5.1. One line of approach is to argue that impromptu speech is, partly at least, created by the occurrence of pragmatic particles. Or, to make the statement more plausible, the occurrence of pragmatic particles in a discourse implies that the discourse is of an impromptu nature.

This argument could be made in two steps. First, the occurrence of a pragmatic particle in an utterance often interrupts the grammatical flow of the utterance, and consequently a grammatically fragmented, and very often a grammatically deviant sentence is created. Secondly, fragmentation and deviance imply impromptu. Thus, the occurrence of pragmatic particles in a discourse would imply that this is an impromptu discourse.

Let us first look at the second premise of the argument.

Intuitively, concepts like PAROLE and PERFORMANCE are intimately associated with impromptu. Grammatical discussions of performance have mainly (though not of course only) focused on aspects of syntax, so that flaws in the syntax of utterances of ordinary conversation have been attributed to the individual speaker's temporary failure to adher to the grammatical rules -- for whatever social or psychological reasons.

Does deviant syntax, then, imply impromptu? And, taking the argument a step further: is syntactic deviance a necessary requirement for impromptu?

It is true, of course, that surface errors are common in the syntax of everyday discourse, cf. e.g. (2).

(2) Yeah I remember like I have a memory of when I was a KID . . . uh say at Christmas time like all of a sudded realizing that I had MISJUDGed the level of . . . expression of happiness that I was . . . giving in the sense that ah . . . all of a sudded I realized that . . .

(BER81-JO23-1)

But we can surely find a comparable piece of discourse which feels just as impromptu, but which does not contain any grammatical errors. The following sample is from Armistead Maupin's *Tales of the city* (p. 167):

(3) So I gorged myself on pizza canapés and did my best to avoid the guy from Brebner's who once told me I was too average-looking to make it as a model. . . . Christ, Mona, you should have SEEN the beauties in that room! There was so much hair spray they probably had to make an Environmental Impact Report before they could hold the party!

And example (4) is from interactional writing:

(4) My feeling then, when I'm not the "home team", is that it is almost never of any use to do anything but agree with feminists and then secretly indulge in a bout of misogeny afterwards. I don't know if other men are less confused or schizo –

So, there does not seem to be any necessary requirement for grammatical deviance to be present in impromptu speech. However, these examples are nevertheless fragmented in Chafe's sense. Their sentence structure is simple, there are few embeddings, and the relative clause in (2) is identificatory rather than information-bearing; (2) also contains an interjection, and a vocative, etc. And, as we saw in sections 3. and 4., impromptu speech is characteristically manifested linguistically as fragmentation. We should remember, however, that fragmentation is also bound to the situational variables of context-of-situation, medium, and topic. That is, fragmentation has different structural realizations depending on the values of these situational variables.

But what about syntactic deviance? If it is not necessary for impromptuness, is it a sufficient requirement? Hardly: the concord error in (5) does not alone suffice to make this utterance look impromptu:

(5) The great number of elephants that used to stroll along the African plains a century ago have steadily decreased in quantity during the first part of this century.

(Note, however, that example (5) further supports our contention that fragmentation is necessary for impromptuness.)

It is true, of course, that grammatical deviance is a relative term. And perhaps there is a way of quantifying deviance and saying that we need a certain amount of grammatical deviance in a text for it to qualify as impromptu.

What is at stake here, however, is not deviance quantity, but deviance quality. That is, it is still feasible to conceive of impromptu as deviance of some form, even though it is not necessarily grammatical deviance. What I would like to suggest, on the basis of the examples above, is that impromptu speech deviates from the Gricean maxims. And in particular, impromptu speech breaks the maxims of MANNER and/or QUANTITY (it is difficult to draw any sharp line between these two, since the maxim of quantity can be subsumed under the maxim of manner): excessive use of words, use of slang expressions, indirectness of expression, obscurity with respect to coreference, and in general, breaches against being perspicuous – in the Gricean sense of 'perspicuous'. A consequence of this view is that the majority of discourse types will be impromptu to some extent – and we notice again that the Gricean maxims have a very non-interactive character.

We should keep in mind, that is, that we have now moved over to the pragmatic or interactive system of impromptu speech (cf. 1. and 3.): to a system which has rules of its own. The only reason why concepts like deviance cannot be thrown out from the discussion at this point is simply that we have as yet no accepted linguistic tools except those that have explicitly been made for the description of non-impromptu speech.

To sum up the discussion in this sub-section: impromptu speech is fragmented and violates the Gricean maxims.

5.2. The other premise of the syllogism put forth at the beginning of this section was that pragmatic particles create fragmentation and deviance.

It is obvious, of course, that pragmatic particles do not form structural constituents with other words in the same way as, say, an attributive adjective may form a constituent with a noun. When pragmatic particles occur initially or finally in an utterance, this is less of a problem, since we can then argue that the particle forms a constituent with the whole sentence. Pragmatic particles, however, do not occur only utterance-initially or -finally. In (6) *you know* can occur in all the haloed positions:

(6) ○ I'm ○ closing ○ the ○ window ○ .

and thus there will be difficulties if we want to assign a head-modifier status to any relationship that *you know* might be argued to partake in.[12] (On the other hand, there are differences of cooccurrence between *you know* and different kinds of speech acts; in imperatives, for instance, *you know* is not as easily employed, cf.

(7) * Close * the ○ window * !

but again, this is connected with deep-functional reasons.)

The following example is adapted from James 1973. Here *you know* does not partake in the constituent structure of (8) in the same way as the other words or constituents of the sentence do:

(8) The linguist who said he liked, you know, Chomsky got fired.

you know refers not to *Chomsky got fired*, but, despite its position, and cutting across the surface-constituent structure rules of the sentence, it refers to *Chomsky* only.[13]

Thus, it should be fairly clear that from a surface-syntactic point of view pragmatic particles often create fragmentation. Example (9) is from Cyra McFadden's *The serial* (p. 144), and illustrates the use of pragmatic particles in writing.

(9) . . . "How come you get all the wheels around here, anyway? I mean, I've got rights, too, you know." . . . "Yeah, sure", Harvey said. "Hey, listen, so do I. I have the right not to eat this goddamn granola every morning. Like, I'm a carnivore, you know? . . .

But, for our implication to hold, we also need to discuss whether pragmatic particles create deviance from the Gricean maxims. To do this, we need to look at pragmatic particles from a psychological perspective.

We know that the kind of grammatical deviance and fragmentation displayed in (9) does not markedly obstruct the addressee's interpretation process of the particular message in its particular context. Paradoxically, perhaps, it rather facilitates the verbal interaction between speaker and addressee. The pragmatic particles function in impromptu speech in a parallel fashion to function words in non-impromptu, expository-prose like speech: they make clear for the addressee the intended relation between the content units of the speaker's message – even to the extent that they may override the grammatical rules (cf., again, section 3.) –; and they do this both cognitively (from the speaker's point of view) and interactively (by demanding feedback from the addressee). Thus, impromptu speech will, for perceptual reasons, be organized into relatively short segments, and it will show abundant redundancy whenever this is interactively necessary.

So, if we look at the use of pragmatic particles from a cognitive point of view, it is not the case that the fragmentation and grammatical deviance created by pragmatic particles also create unintelligibility; it is rather the other way round, viz., that the grammatical make-up of an utterance can create the interactive necessity for a pragmatic particle. In this sense the pragmatic particles COUNTERBALANCE the interactive deviance that would otherwise result.

In practice this works as follows. If a Griceanly appropriate sentence – in the midst of being produced – is found by its speaker to be either wrongly planned, or if it does not ascribe to the proper level of politeness, a pragmatic particle can be used to implicitly transmit what the speaker really wanted to say. And in this sense the pragmatic particles can make sure that the utterance is interpreted (or at least interpretable) in the way the speaker intended it to be.

Thus, if example (8) had been produced without *you know*, it might have been too straightforward, and implied that the addressee lacks this knowledge (i.e. the propositional content of the clause subordinated under *said*) and that he needs to be informed about it. By inserting *you know* the speaker not only implicitly takes the addressee and his knowledge into account, he also manages to communicate the social relation he wishes to create or maintain with the addressee, and he indicates why he, the speaker himself, did not feel confident in producing a Gricean proposition in the first place. (For a detailed discussion of *you know*, see Östman 1981.)

In effect, what this means is that pragmatic particles show up as violators of the Gricean maxims.[14] And here, then, is the final link to impromptu speech. On this basis we can now add the following refinement to our initial implicational statement:

I. Pragmatic particles imply – by creating fragmentation, and deviance from the Gricean Cooperative Principle – impromptu.

That is, the occurrence of pragmatic particles in a discourse turns out to be a sufficient condition for regarding that discourse as having a high degree of impromptuness.

*

It is also worth pointing out explicitly that the discussion above is not only applicable to spoken discourse. The need to qualify our communicative acts is present not only in speaking but just as much in writing – perhaps even more so, since in the latter one's audience is largely unknown, and can be manifold. It is true, however, that we do not often find sentences with *you knows* and *I means* in, say, scientific texts.

Still, our definition of impromptu speech and impromptuness as such readily admits the implicational relation of I. as applicable also to written discourse. For instance, the occurrence of *well* in (10) implies that this particular discourse has a high degree of impromptuness in relation to other discourses with the same situational-variable values. (The extract is from H.W. Armstrong, *The plain truth about Christmas*, p. 7.)

(10) We were born into a world filled with customs, we grew up accepting them without questions. Why? Sheep instinct? Well, not exactly, . . .

And it is worth stressing that difference in medium (and/or context-of-situation, and/or topic) alone is not a sufficient variable for determining the occurrence or non-occurrence of pragmatic particles.

However, certain secondary differences do emerge with respect to these issues between speaking and writing. First, we can briefly note that the aspect of indirectness (cf. 4.) is the main cause for using hedges in writing, since planning is not a major problem, especially not in expository types of writing.

Another important observation is that the hedges and pragmatic qualifiers that we use in the written medium usually take a different form from those in speech. But accepting a potential difference in surface form, it has been found (Chafe 1981) that there occurs about the same number of hedges and (what Chafe calls) EVIDENTIALS in written language as in spoken language. The kinds of hedges that occur in written records range from expressions like *I think*, *I suspect*, to longer ones like *generally speaking*, and they can even take the form of whole sentences. To oversimplify (that is one too), we can say that the verbal material in a sentence that does not add anything to the propositional content of that sentence[15] should be particularly paid attention to from the point of view of pragmatics, and here we will find parallels to the pragmatic particles. The present paper is probably as good a source for examples as any written record, but for the sake of objectivity, let me illustrate my point with the italicized expressions in an extract from John Lyons's *Semantics* (p. 512):

(11) Conventional dictionaries are *essentially* lists of *what might be called* lexical entries. . . . The conventional dictionary *can, for our purposes, be thought of* as an unordered set of lexical entries, . . . *We should not forget*, however, *as linguists*, that *most* adult native speakers of English are accustomed to thinking of word-forms as *relatively* stable written entries . . .

(Perhaps *conventional, however*, and *are accustomed to* should also have been italicized; but cf. fn. 15.)

We notice, then, that pragmatic qualifiers are extremely frequent in writing too, but although their function may be similar (cf. 2.2.), they very often do not have the same form as the pragmatic particles. Nor do they fulfil the sole-function criterion that was introduced in 2.3.

The reason why pragmatic particles do not turn up in expository prose more often than they in fact do is that the reasons for using them are lacking. Rather, over the years, some words and expressions have been stigmatized through negative connotations (for whatever reasons). This is what has happened to the pragmatic particles, and this is why we try not to use *you know, I guess, I mean*, and *like* in expository prose. So, when we say that the use of pragmatic particles implies impromptu discourse, this is a necessary consequence of the associations and connotations that these particles give birth to.

5.3. In sections 5.1. and 5.2. it has been shown that the presence of pragmatic particles implies that the discourse has a high value of impromptuness. The implicational relation could also be turned around, and we could ask, not whether impromptu speech implies the presence of pragmatic particles, since obviously we want to be able to regard a discourse, or piece of discourse, as impromptu independent of whether it contains pragmatic particles; but we could with good reason ask a question with weaker implications, viz., 'Does impromptu speech favour the use of pragmatic particles?'

Again, I think the answer has to be in the affirmative. The question could be answered in two steps:

A.a. Impromptu speech implies the presence of a specific, let us call it unplanned, social situation, where interpersonal relations are in focus, and where it is possible and even at times desirable to (implicitly or explicitly) express one's attitudes to the addressee/audience, and even question (again implicitly or explicitly) the existing status of the interpersonal relations as such (cf. 4.3.).

b. Interpersonal relations and attitudes are prototypically acknowledged and expressed in an implicit manner (cf. the discussion of implicit anchorage in 2.2.).

B. Appropriate means for expressing and acknowledging interpersonal relations include the use of pragmatic particles in one's discourse (cf. section 2.).

That is, impromptuness does not force the use of pragmatic particles in discourse, but it supplies a necessary fertile ground, which in turn creates a predisposition in the pragmatic particles to occur in, precisely, impromptu speech.

6. A symbiosis.

6.1. In the preceding section I showed that there exists a very intricate relationship between pragmatic particles and impromptu speech, despite the fact that – as was shown in 2. and 3. – neither one is necessarily dependent for its definition and characterization on the other.

Using an 'interactional' model from another science, I would like to characterize this kind of relationship as SYMBIOTIC.

The linguistic issues dealt with here do perhaps not form a complete parallel to the biological sense of symbiosis. But I think it is close enough to justify the metaphorical extension.[16] The two organisms (i.e., pragmatic particles and impromptu speech) are of a different 'kind', and they do seem to thrive on each other. (So we cannot talk about a simple one-way parasitic relationship in either direction, but a mutual one.) They do not, however, depend for their existence on each other to the same extent as a biological symbiosis would demand. On the other hand, they compensate for this by having what I have characterized as a mutual cause, or a common root.

The common root gets interactively realized as follows: impromptu speech facilitates social interaction; and pragmatic particles constitute the main phenomena that facilitate, and in some cases even make possible, the interpretation and understanding of impromptu speech.

6.2. Finally, I would like to return to the question I dealt with in section 1. regarding the task of pragmatic particles in language. In particular: 'What does the present discussion imply vis-à-vis the future study of pragmatic particles?' Two things stand out.

a. We should strive towards getting away from superficial characterizations of pragmatic particles. In particular, pragmatic particles are not ultimately definable in the same terms as structural parts of speech (whether clausal or textual). Furthermore, it is not enough to characterize pragmatic particles as occurring in spoken rather than in written discourse. (This does not mean that we cannot say that they have a tendency to occur in spoken impromptu discourse – but as it stands, this is a secondary-level characterization.[17])

b. Although aspects of planning play an important role as socio-psychological causes for the use of pragmatic particles, for most pragmatic particles they do so only in a shallow sense; that is, as a general characterization of the pragmatic particles as a group. The majority of pragmatic particles, even most of those that do have some aspect of planning as their interactive cause, require for their characterization some reference to the area of what

I have here called politeness, including notions like reciprocity and empathy. That is, politeness aspects can give specific characterizations vis-à-vis the internal differences among the pragmatic particles.

FOOTNOTES

[1] This section relies heavily on a number of previous articles and discussions, in particular Östman 1979, 1981, and MS1. I have retained the conventional spellings of what I consider to be pragmatic particles in English. Despite the formal, STRUCTURAL differences between *you know* and *like* (according to which only the latter would be a 'particle'), both are PRAGMATIC particles. Alternatively, we could use *y'know* or *'know* (for *you know*), *a-mean* and *a-guess* (for *I mean* and *I guess*, respectively), and *a-s'pose* (for the epistemic, peripheral pragmatic particle *I suppose*).

[2] It is true, however, that the classes set up by the ethnomethodologists can have members with very different formal characteristics. These classes can, of course, be defined in relational terms, like subject and object in clause-level grammar. Such categories are nevertheless structural in the same way as the categories of, say, relational grammar are structural.

[3] This section is an attempt to reconciliate and/or reinterpret the symposium discussion on impromptu speech with my own views, which are largely influenced by research by Robin T. Lakoff, and Wallace L. Chafe.

[4] Of course, as with all communication, the actual on-the-spot creation process relies heavily on already existing frames, and often makes excessive use of formulaic, set phrases.

[5] In this paper the terms 'planning' and 'planned' will, however, be reserved for a slightly different phenomenon; cf. section 4.

[6] In Östman MS2 I have questioned the appropriateness of choosing these discourse types as prototypical instances; especially so the letter type of discourse.

[7] The distinction between style and register that I have in mind here is that between register as the range of idiolectal variation, and style as a (for historical reasons) socially accepted 'norm' for any such variation with respect to the particular situation at hand. (Cf. e.g. Chapman 1973.)

[8] Robin Lakoff uses only +/- features in her diagrams. It should be pointed out, however, that aspects of a variable are, rather, present to a certain degree, where plus and minus themselves are end-points on a gradience. The following kind of Osgoodian profile representation would probably come closer to being an adequate schematic illustration.

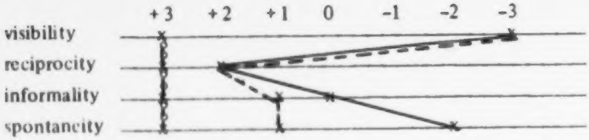

Fig. i.

Key: oral dyad: -o-o-o-o-o-
telephone conversation: - - - - -
letter: ———

Both the feature make-up and the profile nevertheless represent the characteristics of a PROTOTYPICAL discourse type: a prototypical oral dyad, a prototypical telephone conversation, etc.

[9] False starts, and certain kinds of repetitions can be regarded as retrospective planning.

[10] The characterization of clarity and camaraderie is here taken to its extreme. Such extreme situations hardly ever occur in ordinary conversation, nor in other types of discourse.

[11] It may be, of course, that this feeling of impromptu is the result of a conscious, insincere effort on the part of the speaker.

[12] Even a deep-structure description will have difficulties here. Firstly, many scholars regard pragmatic particles not as utterance modifiers, but as predicate modifiers. Secondly, as I have argued in Östman 1978, the kind of utterance qualification that pragmatic particles create is on yet a higher level than performatives. Actually, if it were not for the unusualness of the particular turn of phrase, we could say that pragmatic particles form constituents with aspects of the speaker. Cf. here Kriwonossow's (1977) argument that morphemes on the morphological level and particles on the syntactic level have the same function, only, the former relationship is synthetic, the latter analytic.

[13] The notion of REFERRING with respect to pragmatic particles is here used in the sense of James 1973. Briefly, an element is syntactically referred to when it is picked out as being the speaker's immediate reason for using a 'hesitation marker'. This is a purely structural and sentential notion, which should be kept separate from the utterance-qualifying function of *you know* in (8). Cf. also fn. 12.

[14] Actually, syntactic deviance can be seen as an instance of a violation of Grice's maxim of manner.

[15] This does not mean that I think there is a discrete line between propositional-content and interpersonal communication. There is not!

[16] Actually, a better metaphor would be to talk about pragmatic particles and impromptu speech as mutual EPIPHYTES: plants that grow on other plants without deriving nutrition, but only support from each other.

[17] Such characterizations are comparable to connotations that lexemes carry on top of their lexical meaning – and, as we know, time and again such secondary aspects of meaning can take precedence over the primary ones, and the meaning of the word in question will change accordingly – with time.

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The emergence of speech organisers in a renovated language: The case of Hebrew void pragmatic connectives

The idea that "natural speech" is organised discourse seems by now to be commonly accepted. The traditional belief that only written, i.e. "planned", discourse may be "organised" (and hence that dis-organisedness is a pertinent, if not distinctive, feature of speech) seems to have become obsolete. Moreover, the findings of many new contributions to the subject seem to indicate that precisely because "natural" speech is in many respects "not planned in advance", it uses more coherence indicators (for segmentation, demarcation and concatenation) than planned (written) texts do. This holds true, I believe, even for cultures such as French, where very strong norms of making discourse coherence explicit prevail. Yet it is neither quantity nor (relative) proportion *per se* that seems to distinguish between the organization in natural and in planned/written discourse. I would like to argue that there are *different types* of organisers that pervade each of these categories respectively. That is perhaps not exclusively, but still overwhelmingly so.

Two categories of discourse organisation (coherence) are normally dealt with in the literature. The first category is a variety of fundamental discourse principles such as *order, succession* (and/or *contiguity* and *vicinity*) or semantic *parallelism*. The other category consists of specific morphemes/lexemes which specifically express organisational relations both locally and formally. They are often called "pragmatic connectives". "Therefore", "then", "thus", "while", "however", "but" are some such items. As indicated above, some cultures tend to require these organisers more than others do. For instance, French will endeavour to use them more than any other European language. Obviously, such policy makes French texts, if compared with other languages, more explicit (and "explicit*ated*") as regards logically analysable discourse relations. But, on the other hand, the strong pressure upon discourse producers to employ these items clearly generates many instances of pseudo-logically motivated discourse, as the organisers employed often become relatively or highly *depleted* (or "void"). Thus, in many instances of written English discourse where such items as *thus, however, yet* or *but* are employed, they no longer carry a semantic, logically analysable (or "explicitatable") function, but merely work as formal vehicles for demarcation and concatenation. Discourse could, as it were, very well do without them with the same semantic results. Yet they do not become "superfluous", because they help both encoder and decoder navigate along a specific discourse. The decoder's attention is drawn by them more readily, and quite instantly, to discourse shifts so that the uninterrupted flow, as it were, is more easily segmented for him. The encoder, on the other hand, has gained with these items an easily accessible repertoire of organisers which at the same time do not involve rigorous, clearly semanticised relations. I believe that it can be sustained that *the more depleted the organisers, the quicker (and smoother) encoding becomes.*

This distinction between fully semanticised (and logically analysable/ explicitatable) organisers on the one hand and (relatively) de-semanticised (or depleted, Weinreich 1964) on the other, seems not to have been given proper attention in the literature. With the growing preoccupation with pragmatic relations in discourse, only "semantic(ised)" pragmatic connectives are normally dealt with. The behaviour of the same connectives (and various others) when the "logical" constraints no longer apply is either ignored or just mentioned *en passant.* These depleted connectives, which I labelled several years ago, for the sake of conceptual symmetry, Void Pragmatic Connectives (or, in short, *VPC's*), which are probably marginal in written discourse, play such a major role in impromptu speech that ignoring them is a disturbing inadequacy. This role, I would like to argue, is a pertinent feature of speech, generated by the specific needs of a speech situation. If one of the needs of speech is maximum ease in both production and understanding, then, surely, at least part of this 'ease' can be more efficiently achieved thanks to the fact that large sections of discourse are depleted, and consequently 'automatised' to various degrees.

"Automatisedness" and "depletion" are two correlated aspects. The more "automatised" signs are, the more depleted they are likely to eventually become, and vice versa. As far as organisers are concerned, I would like to argue that when they become "depleted" they actually are employed in discourse very much according to the same principles which normally govern non-verbal gesticulation. It has been amply sustained that, with the exception of "semanticised" gestures (such as those for 'yes' and 'no'), interlocutors hardly notice gesticulation in their own culture (while remaining very much aware of gesticulation in other cultures), though they fully perceive it and process messages with its help. The same holds true for VPC's. People are unaware of having used them, even when one tells them they did just a few seconds after they themselves produced them; similarly, listeners would not admit having *heard* them. Yet, when VPC's are *omitted* when normally expected by the conventionalised models of speech in a certain community, interlocutors clearly feel that certain elements are missing. Sometimes this absence is described as "bookish" or "artificial", "insincere", "snobbish" and the like. On another level, the fact that language teachers and language manuals hardly teach them to non-native speakers is also evidence of the incredibly low awareness of them so current even among "specialists". Other evidence indicating both unawareness and miscomprehension as regards VPC's are the attempts to explain their usage exclusively in terms of fully semantic "meanings" (a good example is Varilyeva n.d.). There have also been attempts by teachers and other controllers of language to banish them altogether from "the good usage" with the explanation that "they do not mean what they normally do and hence are symptoms of language corruption".

A passage by Stålhane (*Folkhemska*, Stockholm 1956) is a typical example of this attitude. "Det är mer och mer tydligt", says Stålhane, "att vi svenskar har en språklig svaghet för det – otydliga. De orimliga överdrifterna, den meningslösa underbetoning, de uppluckrande omskrivningarna befriar oss från en verklig meningsyttring." (p. 86) "I en intressant radioserie", he adds, "med deltagande av två docenter och en professor, började inläggen nio gånger på tio med mer eller mindre betonat *ja* – alldeles oberoende av sammanhanget." (p. 58) And the phrase which seems to have made him most furious is "Nå, då gick vi då" (p. 59). Such indignantly negative judgments of the high frequency of VPC's in impromptu speech can be furnished for any language. But everyone knows that if the quantity of VPC's drops below a certain level, for all but formal discourse situations, a speaker's language would be considered "non-authentic", and if the language he uses happens not to be his mother tongue, this would be taken to be part of his "foreignness".

The use of language in impromptu speech by non-native speakers, as well as interlingual translations, are highly informative cases of the status of VPC's and their active control. With non-native speakers, two diametrically opposed patterns of behaviour can be observed. In the first pattern, speakers totally ignore the existence of VPC's and consequently either omit them altogether (thus often making a highly 'bookish' impression) or introduce those VPC's they normally use in their own mother tongue. My files show instances of French people and Italians unnoticingly using 'bien', 'eh bien', 'alors', 'allora' or 'bene' in English. Perhaps the most amusing case I have encountered so far is that of a native speaker of English, who lives in Israel and with whom I used to have long talks in Esperanto. His Esperanto was impeccable, yet he frequently used *Hebrew* VPC's. The fact that he did that, instead of employing his own native English items, was probably due to the pattern of behaviour with non-native speakers, which involved a quick adoption of the VPC's in the newly acquired language with an over-exaggerated use as a result. This phenomenon has been observed for many other linguistic levels with new learners whose command of the language has not yet reached the level of standard balance a native speaker normally achieves. Another interesting phenomenon is that quite often the foreign VPC's are introduced by these new learners into their own mother tongues, after they have neglected the latter for a certain period.

As for translation, this involves understanding of written texts, usually fiction, where some simulation of impromptu speech has managed to crystallize. Naturally, such a simulation cannot be identical with authentic impromptu speech, and is by nature a stylisation of it. Yet in certain literatures, quite elaborate models have emerged, which in many respects come close to natural speech. If one has to translate from such literature into others, where the level of awareness, the degree of use and functional manipulation of VPC's are low (or almost non-extant), clearly what emerges will be inadequate renderings. I should like to emphasise that the availability of a certain repertoire in a language for certain tasks does not necessarily mean the same repertoire is available, in part or in full, for other tasks, too. There is no reciprocal admissibility of items between systems within the same language polysystem. With VPC's, this is even more remarkable owing to the low awareness of their function on the one hand and their rejection by standardisers on the other. An interesting case would be a contrastive study of Russian and English literatures. Both Russian and English widely use VPC's in impromptu speech, yet English *literature* has made relatively poor use of them, while Russian prose developed them into a major compositional and stylistic device. As a result, whether actually "understood" or not by English *translators*, the Russian VPC's are often either omitted or misrendered in English translations.

This last point makes it clear how much we depend on the existence of a spoken colloquial if we want to investigate the nature of VPC's and their usage in a language. Written sources, in most languages, are even less sufficient for VPC's than for the other constituents of impromptu speech. One can hardly reconstruct their use in previous historical phases, let alone for languages which are no longer spoken. It is therefore of the utmost interest for our purpose to study cases where certain processes are either recent, or almost observable 'in the making'. For instance, an interesting case would be the phase when various *lingua francas* have become a true mother tongue for a second generation of native speakers. Similarly, planned languages, such as Esperanto, can furnish no less interesting information. In contradistinction to other so-called "artificial" languages, Esperanto has managed to become a mother tongue for quite a remarkable number of families world-wide. Hebrew, which will be discussed in greater detail in the following, is an excellent case of this sort. It differs both from *lingua francas* and from Esperanto not in principle, but in its richness of resources and codified traditions, as well as in the degree of success, which is almost unique. What it can demonstrate is the primariness of VPC's in the sense that they are not accidental results of some blind depletion mechanism in language (and sign systems in general), but generated through depletion by primary communicational needs. This hypothesis can no doubt be inferred from the material available for 'finalised' systems as well. Yet the possibility of corroborating it with the help of a case where the very processes of VPC emergence can to some extent be more closely followed, makes this case even theoretically valuable.

2

Hebrew, as is well known, gradually ceased to be used as a spoken language until it probably almost stopped being one during the 2nd century C.E. This does not mean that there were no longer places where it was continuously employed as a daily tongue, but the majority of the Jewish people, in both Palestine and the diaspora, went over to using other languages. The ultimate decline was caused by the brutal suppression of the second Jewish revolt against Rome (135 C.E.), the results of which were an almost total destruction of Judea, while Galilee, which did not take part in the rebellion, suffered less damage. Yet while no longer daily spoken, Hebrew continued to function as the major standard language of the Jews for practically all daily purposes which necessitated communication in writing. It would not then be true to describe it either as exclusively 'literary' or 'dead' in any sense. On the contrary, it was very much 'alive' due to the fact that almost no other language ever succeeded in gaining the same status and prestige. As a result, it developed all the time in the sense that it was made to fulfill the changing needs of written communication. Even when from time to time another language was adopted by one or another Jewish community, its use gradually became complementary rather than alternative. If texts of general interest were produced in that language, sooner or later Hebrew versions of these would emerge to make them widely acceptable to all communities. Arabic in the Middle Ages did not push Hebrew aside, although it definitely usurped various sections previously occupied by the latter. The same holds true for Jewish-Spanish and Jewish-German (later called Yiddish) in Europe. Moreover, the need to read the Hebrew texts aloud on various occasions made it necessary to have accepted phonetic standards. As a result, out of the many historical pronunciations which might have been current in Palestine, only two varieties ultimately survived. One probably originated in the Galilean tradition, while the other perhaps went back to the Southern Judean one. As a codification of everything related to reading the sacred text and the prayers was of utmost importance, even such issues as metrics eventually became a matter of official culture.

Due to its common use in various contexts, Hebrew never imposed insurmountable problems on its users, and even when objective difficulties occurred, they never led to a rejection of the language. Thus, Solomon Maimon still considered it quite natural to write mathematic works in Hebrew, modern Hebrew newspapers started appearing during the first third of the 19th century, and secular literature in Hebrew was not given up as an adequate tool for artistic writing in favour of some other available language, although some of the Hebrew writers in Eastern Europe also made use of the common Jewish vernacular at one time or another. The fact that Hebrew was not a spoken language does not seem to have disturbed anybody, and the ideology preaching its 'revival' did not emerge until relatively late. Even when there emerged a political movement for national revival, Zionism, the idea that Hebrew could become a spoken vernacular for the politically revived nationhood was not at all self-evident or generally accepted.

In practice, however, the fact that Hebrew was not a spoken tongue generated many difficulties most of all for fiction writers. From the very moment that they were no longer interested in confining themselves to describing ancient settings of Biblical times, rendering actual Jewish life with a non-spoken vernacular posed many problems to be solved. No doubt simulation of natural speech constituted the toughest problem. This was the case not just purely for linguistic but also for literary reasons. As the norms of literary Realism penetrated into this literature, most writers could not rest satisfied with a neutral, highly classical literary dialogue. They had to create something which could remind the reader of a more authentic spoken tongue. As a result, they adopted and developed sophisticated methods, by which Hebrew domesticated features from the Yiddish vernacular on the one hand and from the most available adjacent literary language, Russian, on the other. This use of Russian was necessitated because while Yiddish could supply certain features of impromptu speech, it itself lacked a literary simulation technique and possessed no accepted stylisation for it. For the fact that a certain vernacular is used in speech by a certain community does not automatically mean that it possesses accepted means for introducing it into literary texts. In order that a certain language might be stylised there must emerge patterns (or models) by which the way it is transported will be efficiently recognisable and thus functional for the required literary purposes. To achieve this, literature needs experimentation. But as experiments are not always allowed the necessary span of time, because there are too many immediate needs for a literature to be able to wait too long, at least part of the solutions used are eventually taken from whatever source is available. This is why both Hebrew and Yiddish literatures during the 19th century tended to make quite extensive use of the Russian repertoire of solutions. When speech had to be reported, Russian could already offer a great number of models. No wonder that both Yiddish and Hebrew dialogue are often modelled after Russian principles on both compositional (organisational) and material (stylistic) levels.

There is no doubt that Yiddish, like any other spoken vernacular, possessed a specific stock of VPC's. Yet because it turned to Russian for solutions, the latter became a filter even for Yiddish. As for Hebrew, the need for the simulation of impromptu speech was so pressing that with the large stream of other transferred items, VPC's came in as well. In my papers "Russian VPC's in Hebrew literary language" (forthcoming in *Theoretical Linguistics*) and "Gnessin's dialogue and its Russian models" (forthcoming) I discussed the selection principles by which Hebrew created such ad-hoc VPC's. These could never gain the unequivocal status of "natural" VPC's, as they either remained incomprehensible to the reader, or else he had to decipher them by reconstructing them *in terms of another* language. Furthermore, the methods and particular solutions could not be unified throughout literature, as there was no common extant repertoire in the linguistic reality of Hebrew itself, from which it could be taken. In spite of this, those writers who elaborated models, including VPC's (in contradistinction to others who stuck to previous traditions where this policy was yet unknown), having been guided more or less by the same norms, have arrived at very similar, or even identical solutions. Thus, two major options for the simulation of speech in fiction were already available about the turn of the century. On the one hand, there persevered the style which prevailed prior to the extensive domestication of Russian (and Yiddish) patterns. On the other, there emerged a rich repertoire of VPC's, which constituted part of the domesticated repertoire at large. What role did this repertoire play for the development of Hebrew as a spoken vernacular in Palestine, and later in Israel? It seems that it played a major role for the *literary* language, in both canonised and non-canonised literature, where it persisted for a long period of time. In the spoken vernacular, however, the facts seem to have been different.

3

A precise history of the emergence of Hebrew as a spoken vernacular has not been written yet. Unfortunately, much has already been forgotten. Although a relatively short time has elapsed since the beginnings of modern Hebrew (around the 1890's), the evolution of the language and social, cultural and political developments have been so dynamic that hardly any phase persisted for more than a short span of time. There are therefore no agreed-upon views on this issue, and a great deal of the superficial descriptions we often get in current history books is coloured by myth.

It seems, however, that the origins of modern Hebrew were not Hebrew *belles lettres* exclusively, in spite of the fact that literature constituted the core of cultural activity and the axis around which the whole ideology of the national "revival" revolved. Confronted with the immediate needs of actual speech, part of which by nature could not be controlled by deliberate decisions (e.g. intonation, pitch, pronunciation, etc.), the first groups of speakers made use of whatever source that was within reach. Although the passive understanding of written Hebrew was relatively wide-spread, the *active* abilities of the would-be speakers fell much behind. Willy-nilly they used loan-translations from their mother tongue, which thus became a direct substrate of the renovated tongue. Naturally this process did not function equally for all aspects of language. While more noticeable, and therefore avoidable in principle, in grammar and vocabulary, it was definitely less so in less "conspicuous" and more "obscure" domains of language among which one should, from the point of view of the speakers' awareness, count void pragmatic connectives.

The use of the mother tongue by most non-native speakers of Hebrew was in principle identical with the use made of the latter in literary language, but the fact that Yiddish here played a greater role than Russian eventually provided different specific solutions. No identical solutions have therefore been achieved with the elaboration of a VPC repertoire in literary discourse and the spoken vernacular respectively.

Let me remind you that the "literary" VPC's consisted almost entirely of domesticated items. Yet the fact that they were accepted in the literature which ultimately was accepted as canonised made most of these items an integral part of official Hebrew (i.e. "correct" in the eyes of standardisers and purists). On the other hand, the solutions the vernacular provided, which were not admitted into new literature even as late as the 1950's, were more often than not considered "incorrect" and even "vulgar" and hence "dispensable". This is, of course, a perfect illustration of the "cultural" rather than "natural" status of "authenticity" and "correctness" in a language. For, if 'authentic" items were rejected as "non-Hebrew", while items fabricated at the writing-desk and never adopted by current use were accepted as "correct", then it must be recognised that not all instances of "natural authenticity" necessarily or univocally also become "culturally authentic" as well. The aggressive campaigns by teachers and other purists against the poor VPC *az* ('then'), and, to a lesser extent *tob* (pronounce: /tov/, 'good, well') as arch-pollutors of Hebrew, completely resembles the indignant attack by Stålhane on Swedish *ja* and *då*. Yet, both *az* and *tob*, undoubtedly loan-translations from Yiddish, have become the most usual commencitives (initial VPC's) and concatenators in Hebrew impromptu speech. Several other connectives pertain to the same category, such as *tir'e/tir'i* (= English 'look here' or 'I say'), used as a commencitive, *ve-kakha* ('and so') used as a finitive (a signal of 'end of segment') and perhaps *al kol panim* ('at any rate'), used as a transferrer (a signal of change of subject).

The case of *az* is particularly illustrative of the decision mechanism in substrate interference. I believe it must have emerged by domestication of the Yiddish VPC *iz* (e.g. "iz vi filt ir zikh?" = well, how do you feel/how are you?) through accidental *sound similarity*. The fact that Hebrew "az" means 'then', and is, furthermore, identical in sound with the Yiddish particle "az" (= English 'that', Swedish 'att'), probably made the "searching process" of colloquial Hebrew particularly smooth. On the other hand, it was perhaps this conspicuous use of Yiddish, still felt by the first generation/group of users, that made it such a target for vehement criticism.

Both the literary set of VPC's and the emerging colloquial one have thus arisen through transfer from other languages. The opposition that emerged between them was that of *high/official* + *non-current* vs. *low/non-official* + *current*. Also, their status as VPC's cannot be described as completely equal. The literary set should be described as second-hand, lacking that degree of immediacy that actual VPC's normally have in both impromptu speech and simulations. The failure of speakers to identify the literary items as potentially usable in speech for pragmatic functions simply has led to ignoring them. On the other hand, the function of the substrate in this issue (as in many others) was a result of unplanned (and often unconscious) operations, which is the reason, I believe, that it became such a success.

It should be emphasized, however, that both literary and colloquial VPC's were generated through transfer and domestication by non-native speakers. These could still do "back transfer" of domesticated items when necessary (e.g. in reading literary texts), at the same time as their original colloquial connectives exerted power upon their Hebrew speech. These factors, however, no longer prevailed for the new generations, for whom Hebrew gradually became more and more of an *exclusive* mother tongue. For them, a great number of the items encountered in literary texts became highly enigmatic, while no other linguistic system persisted in imposing itself on their impromptu speech. Their use of VPC's no longer reflected their habits in some previously utilised mother tongue. They became, so to speak, liberated from pressures of another culture.

This is where the most crucial part of our VPC test case truly begins. The loss of the possibility of resorting to another language now left Hebrew alone to confront with its own resources, unhelped, as it were, by the needs of impromptu speech. If, for instance, the VPC repertoire were to stay inaugmented, that could at least raise certain doubts as regards the universal principle of discourse organisation by means of, inter alia, void pragmatic connectives. This however turned out not to be the case, as there seem to be sufficiently solid data indicating that some independent VPC's ultimately have managed to emerge.

However, this development was far from instantaneous. I would like to claim (though the data are not beyond doubt) that indeed the rate of VPC's in current Hebrew impromptu speech must have dropped simultaneously with the decreasing interference from the substrate. Moreover, I believe that *contemporary* colloquial Hebrew uses VPC's relatively sparingly, at least in comparison with some European languages. I suggest that the use of foreign languages by Hebrew native speakers might also reflect the status and position VPC's hold in their own vernacular. I have registered, for instance, that English spoken by Israelis tends to be almost void of any VPC's either English or Hebrew in form (in contradistinction to such habits as observed with other speakers of other languages), especially when the speaker, although possibly fluent in the language, has never used it intensively in some English-speaking country. On the other hand, Israelis who have stayed for longer periods in English-speaking countries often insert English VPC's into their *Hebrew* speech, at least as a transient pattern of behaviour (normally for some time after having come back home from a longer stay abroad). Other indicators of low-rate usage of VPC's are radio and television talk programmes. In these, I have observed a definitely higher elimination rate even of the old colloquial VPC's which are normally highly frequent in non-public impromptu speech.

This pattern differs quite remarkably from Swedish, English, American or French habits. Remember that in the classical piece by Stålhane, even "a docent and a professor" did not try to control their colloquial VPC's, let alone football players and other non-highbrows interviewed in English or Swedish mass media. This high control pattern in Hebrew cannot be simply described as a result of education pressures (or "brainwashing", if you will). Firstly, 'education' did not concentrate on the whole category (the nature of which was not understood), but rejected various specific *items* only. Secondly, even education and brainwashing can exert only limited power as constraints on actual impromptu speech. It would, therefore, be more plausible to see the cause of this behaviour in the relatively weak position VPC's assume in colloquial Hebrew.

The contemporary situation, then, is extremely fluid. Yet it seems that the weak position of VPC's is a transient phase rather than a pertinent feature of the modern vernacular, an unavoidable gap between the disappearance of substrate pressures and the emergence of home-made alternatives. In recent years, a growing number of VPC's can be attested, the origins of which cannot be related to any adjacent system. Their recency can perhaps be sustained by the fact that older speakers, including native ones, are not yet acquainted with the new items, and some will probably never adopt them. Another indicator of recency is perhaps the almost complete lack of awareness of their existence, an unawareness which is even greater in degree than that prevailing as regards the older VPC's. Such new items are *lo* ('no') and *ken* ('yes') both commencitives, or *lo ki* ('no because'), mostly used as transferrer (i.e. a finitive + commencitive). Such conversation sequels as: * ' – It's a nice day"--*" – No yes it's a nice day", or * "Are you completing now your B.A. studies?" – "No yes I do" are quite typical and widely attestable at all levels of society. The similarity between these and several counterparts in various languages (Swedish *'nämen ja'* or Russian *'Da net'*) are truly striking, but there is no evidence of, nor any reason to hypothesise, any sort of interference. Such similarities should of course be used by those interested in establishing the rules which govern the selection of items-to-be-depleted for use in pragmatic functions. In our case, I would not yet venture to attempt an explanation of the specific selection of the items discussed. Why precisely "no", rather than some other form, has been selected cannot be satisfactorily explained at this stage of research.

The main point here is not the specific item, but the fact that void connectives have emerged independently of other language systems. Their source, usage and distributional contexts are no longer reflections of habits in some other culture. And, furthermore, they now seem to be growing in number. How long it will take the official culture, as manifested in literary traditions, to recognise them in the first place and then to make use of them for literary purposes is not only unpredictable but also not necessarily significant as regards their status and function in impromptu speech. There are no universal rules of speech simulation operating in all literary languages. I already mentioned that whereas Russian literature has exploited the colloquial Russian VPC repertoire to the utmost, English literature has hardly made any real use of the English colloquial repertoire, while Dutch seems hardly to recognise the existence of such an option (though more checking needs to be done before conclusive evidence is established). Therefore Hebrew colloquial VPC's may go on being developed and their use may be intensified, while the literary language may stick to its old quasi-VPC's fabricated in Eastern Europe, or may drop them altogether. At any rate I am convinced that the emergence of independent VPC's in the vernacular firmly sustains the primariness of the VPC function, in the sense that it imposes on a language depletion procedures in order to produce those functors that are so badly needed in verbal communication.

I would like to conclude this paper with a brief remark on the varying VPC rates of various individuals. While the need for VPC's is universal, certain individuals use them, even within the conventions of their particular culture, more intensely than others. This might be a symptom of "uncertainty under tension", so beautifully parodied by Gogol' with the speech of Akakij Akakijevich (who mostly pronounces no other elements than depleted stock, VPC's included). On the other hand it may be an indicator of something totally different, which I would label "the speaker's strong need to organise his discourse", or "the speaker's anxiety to draw the maximum attention to all his shifts of mind". This endeavour to produce highly coherent texts in impromptu speech through VPC's does not necessarily coincide with other features of coherence (or cohesion) in the same specific discourse. More often than not, VPC's function as the last resort for organisation and coherence in an otherwise quite elliptic and vaguely concatenated speech. This is where we leave the soil of semiotic and socio-linguistic analysis and go over to psychological considerations and idiolect analysis. Deplorably, our knowledge of these aspects of language is even more limited than that of the other problems I have discussed, which is why I must desist venturing into such territories.

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Contrastive analysis and impromptu speech

Contrastive analysis

The history of contrastive analysis is an interesting mixture of high hopes, severe refutations, and persistent search for possible solutions of various theoretical problems. To date, after thirty years of massive and wide-ranging research within the CA paradigm, the number of applications is very small indeed. Jacek Fisiak (1980) points out that doubt concerning the validity and usefulness of contrastive studies "results from a number of misunderstandings and misinterpretations created by such factors as the peculiar methodological status of CS, the lack of clearcut distinction in the past between theoretical and applied CS. . .and the lack of a precise formulation of the different aims of theoretical CS and applied CS as well as the confusion of the relationship between CS, the psycholinguistic theory of interference and errors, and the theory of second language learning."

The distinction between theoretical contrastive studies and applied contrastive studies is of particular importance. Theoretical contrastive studies serve, similarly to studies in any single language, the purpose of adding to our knowledge of the languages concerned, languages in general, or linguistics without any objectives beyond the theoretical aim. Applied contrastive studies are carried out to solve a problem which is, in most cases, language-external, either in the language user or in the society around him.

The problems in contrastive linguistics centre on a certain number of major issues:

(1) *the theory and methodology of CA* (see Sajavaara 1977) as relates to translation equivalence, theory of transfer, the idea of the independence of descriptions, the abstractness of the analysis, and the static nature of the analysis.

(2) *conceptualization of applied linguistics.* Theoretical issues *may*, and often *do*, result in knowledge that is applicable to practical ends, but this

does not mean that all theoretical studies automatically yield applications. Applied linguistics, and applied contrastive studies, should be problem-oriented. This implies, eg., that expansion of traditional linguistics to text and discourse – including impromptu speech – is not a true solution to the dilemma of CA.

(3) *conceptualization of linguistics.* Language has usually been equated with the grammar of the language concerned, and inferences have been made for the purposes of language teaching, for instance, as if the use of a language were restricted to the use of its grammar. Grammatical competence is highly insufficient to explain phenomena involved in language behaviour; categories abstracted for linguistic analysis are not necessarily categories that make part of processes in human speech communication. Linguistic theory has been a rather meagre substitute for an overall theory of human communication in interactional situations.

(4) *conceptualization of language learning.* For the purposes of problem-oriented CA, a language learning theory is needed which could explain the major processes involved. There is no such theory at the moment, nor is there a consistent learning theory that could be used as the basis of such a language learning theory. As far as these questions are concerned, we are, I think, at the threshold of a very exciting period. Particular attention should be called to individual differences in learning, and in language learning in particular. Not all people learn the same way in all contexts. In such research, proper attention should be paid to differences revealed by the context, the learning process proper, the input provided, and the final product of the learning process. Weaknesses in our view of language contrasts as derived from the learning theory are very evident, for instance, in the discussion concerning transfer.

(5) *conceptualization of language teaching.* This is linked with what has been said above about language learning. Language teaching has been strongly teacher-oriented, and what goes on in the learner has been seriously neglected. Learner *products* have been the major concern.

Most of the discussion of the theory of contrastive linguistics has centred on the problem of equivalence. It is self-evident that equivalence figures high in the list of priorities for a contrastive analyst, but CA has been handicapped by the fact that equivalence has been mostly considered within the framework of certain particular grammatical models as applied to the description of a certain pair of languages. The methodology applied has mostly been, accordingly, a description of similar elements in two language codes and their juxtaposition. This type of research is insufficient for the purposes of *applied* contrastive analysis. This is not to say that it is irrelevant or unnecessary: the information available about distinctive elements in the languages studied may be of significance for a deeper CA which goes beyond the codes to various processes involved in the production and reception of messages. Structural contrastive analysis *may* provide us with important tools when we are trying to crack certain cross-linguistic problems lying at deeper levels.

Communicative framework

A communicative situation requires at least two participants in a certain setting. The participating individuals bring a certain number of elements into the situation which cannot be excluded if we are to deal with impromptu speech. We have enough past examples of the exclusion of important parameters through the idealization of the data required by the theoretical framework. An individual has always a goal of some sort and, to reach this goal, he makes use of certain processing heuristics, ie. a kind of script or schema, based on his earlier experience with similar situations plus certain practical means available to him in the particular situation concerned.

The speaker-hearer's behaviour is affected, to a great deal, by a number of speaker-internal factors. These include the speaker-hearer's will and intention, his needs, various emotive and affective variables (which may have an important function in the retrieval of knowledge from the memory base), performance potential, level of consciousness, processing load, etc. Some of these speaker-internal factors are open to interference from a speaker-external source, for instance, the other participants in the situation and the external manifestations of their speaker-internal factors (ie. their goals, needs and intentions), the time available, the setting including aspects such as discourse history and simultaneous events, and the participants' common history and shared/expected knowledge.

The practical means consists of more or less automated processes/programmes and various kinds of strategies. The borderline between processes and strategies could be drawn between subconscious and conscious ways of carrying out various tasks of communication, but it seems that this kind of borderline can never be strict (cf. Faerch and Kasper 1980). Faerch and Kasper, for instance, say: "strategies are *employed* by the individual (agentiveness), in opposition to processes, which *take place* in the individual". This distinction has some important consequences for applied contrastive analysis, which aims, for instance, at the treatment of second language speech processing. If strategies involve conscious procedures from the part of the speaker, such procedures can also be interfered with directly; they can be manipulated by means of overt teaching. The same is not true of processes: overt manipulation is not possible because only the products of processes are open to conscious examination, and therefore indirect methodology is required to make adjustments in them.

Language use should necessarily be observed against the dynamism of the processes and strategies of human interaction. In situations of language use, the participants themselves construct, or create, the ingredients of communicative success. The building blocks, eg. the elements of the language code, are common to all those who know the language, but to a great extent the way in which the blocks are used is recreated in each individual situation afresh. Most human interactional situations cannot be described in terms of passive automata, the role of the participants is very highly active and involves various problem-solving strategies simultaneously with various strategies and tactics used to deal with problems in communication and interaction.

Speech can be characterized as an intersection of a number of continua. In his paper Jaakko Lehtonen presents a number of parameters which make part of such continua. In the event of a minimum of, or zero, planning, the speaker can be expected to rely on scripts, schemata, and prefabricated plans or apply certain ad hoc problem-solving strategies to deal with the requirements of the situation. Two situational continua which may be of importance for the analysis of impromptu speech could be discussed in this context. One is intentionality. If communicative signals are described as intentional from the part of the speaker and thus involving a choice by him, intentional impromptu speech can be expected to be rather rare, and the impromptuness of impromptu speech decreases with the increase of intentionality. A great deal of impromptu speech is evidently only informative: it is significant for the hearer, while the speaker has no chance to make any communicative choices.

The other factor is shared past experience by the participants in the speech situation. If the interactants share a great deal of common past experience, the speakers have less need to fill the channel with speech that is not communicative. Whenever such a need arises, it normally reflects certain problems in mutual intentions. In situations with the participants having a great deal of shared experience, the incentive for impromptu speech often comes from factors external to the original speech situation.

It seems to be very difficult to define the criteria for impromptu speech in terms of factors relating to speech proper. A good candidate for a definition is perhaps the speech situation itself: impromptu speech could perhaps best be described as speech arising in a certain type of situation.

So far, linguists have not paid enough attention to various socio-psychological aspects of language and language use. Speech communication has been abstracted from its proper context of human interaction. It is only rarely that naturalistic data from speech situations resembles laundered material of the kind that is often found in many linguistic representations of interactional communication. Problems may arise for a multitude of reasons. The speaker may have to interrupt the ongoing procedures as a result of the listener's reactions, he may realize that his plan has been wrong, the reactions of the listener imply that his interpretation of the message has not been what was planned, simultaneous events make it necessary for him to interrupt his speech, or the original message is abandoned in view of the developments in the situation.

In most cases, it is impossible, on the basis of the final product, to see if it really represents the original intention or if it is either formally or contentwise reduced or adjusted (cf. Faerch and Kasper 1980).

In true communicative situations, and I assume on the basis of what was said above that impromptu speech is not usually communicative in this sense, the speaker formulates his message on the basis of what he thinks the listener knows, believes, and thinks, the listener's assumed attitudes and feelings; the listener's reactions to his speech; mutual agreement or disagreement on attitudes and opinions; and shared and expected information. The participants mostly start from the principle that they want, or do not want, to communicate something, and thus their behaviour reflects their willingness, or unwillingness, to understand each other. In an impromptu speech situation it is to be expected that the degree of impromptu character of speech decreases with the progress of the communicative situation.

Most communication, impromptu speech included, works with approximations. Most final messages are only pale reflections of intentions, and normally there is no way of knowing whether the hearer's interpretation of what the speaker says is what was intended by the speaker (a fine illustration of this is given by Ogden and Richards in their list of meanings). The models of communication which represent human interactional communication by means of models in which reception is a mirror image of production are highly defective and insufficient for this purpose. Both parties are faced with a problem of reaching agreement: the speaker is supposed to give enough cues, verbal and non-verbal, for the hearer to be able to construct a model of what is being intended. The hearer is an active participant: he makes use of the cues transmitted by the speaker and correlates them to other parameters, some of which are listed above, to create the most probable interpretation of the intended message. What goes on creates several consecutive cycles.

The processing system

The Finnish-English Cross-Language Project applies the following principles to the study of cross-linguistic phenomena:

(1) Representations of grammars that are available are not psycholinguistically real, they do not represent processes involved in the production and reception of messages.

(2) Processes of production and reception must be described communicatively (see Sajavaara and Lehtonen 1980). Grammatical rules are regular structures of language which function as constraints. They are not models for mental processes. A communicative, dynamic model describes how the speaker implements his communicative intentions and how the hearer deciphers the speaker's intentions.

(3) Communicative interaction has a purpose which is mostly language-external. People do not interact to produce utterances but to serve purposes that are outside language.

(4) Production and reception are creative processes, and in natural situations of language use the reception of messages is seldom possible on the basis of the input signal alone. Utterances are not usually planned as entities:

the opening is normally cued by the previous utterance or language-external phenomena in the situation.

(5) Human information processing requires a processing model that is heterarchical (see Sajavaara and Lehtonen 1980). Processing takes place in real time, and a time-sharing system is needed to explain the phenomena involved. Linguistic information is of equal value with non-linguistic information for the purposes of interpretation.

(6) The primary process is top-down, ie. knowledge-driven, but it is simultaneous with the secondary, bottom-up, input-driven analysis (Lindsay and Norman 1977:278ff.).

(7) Lexical items serve a function which may be of greater importance than that of grammar. Lexical items are intersections of various types of information about their use in utterances; this information includes that about grammatical, semantic and pragmatic constraints as well as that about frequent word combinations, prefabricated phrases, etc. (see Morton 1979). Lexical items carry an important part of the semantic structure of the utterance, and they activate various processing procedures in reception and production.

(8) Speech perception is based on identification derived directly from cue features constituting the 'Gestalt' of lexical items. A phoneme identification process, which is available simultaneously to the direct identification process, is only resorted to in cases of failure to identify elements directly, ie. when for instance the cues available match no item in the data base. Both of the two channels are open all the time, but phonological identification is only an auxiliary strategy that is activated exceptionally.

The methodology of contrastive analysis

The traditional methodology of contrastive analysis is based on the isolation of rules and structures in the languages under scrutiny and their comparison mostly in view of the equivalence criterion. Such contrastive analysis adds, as was pointed out above, to the existing body of knowledge about the languages concerned or about language in general, but it does not necessarily serve purposes outside linguistics such as language teaching, the way CA was originally expected to do. A different approach is needed based on a communicative principle.

The introduction of the communicative framework means the introduction of contrastive discourse analysis. Contrasting of structures in laboratory conditions is not sufficient: the contrastive methodology applied should be adequate to cope with all parameters of communication which make it possible or impossible for the participants to understand messages. In this sense, traditional contrastive analysis has been both too simple and too complicated, too simple through the fact that it has mostly been constrained to elements in the language code, too complicated in that it has been assumed that all the levels covered by linguistic analysis have been constantly activated. What has been said above implies that, in addition to various linguistic parameters, attention will have to be paid to those that are psycholinguistic and sociolinguistic. The psycholinguistic contrast takes place in the 'mind' of the speaker, and therefore naturalistic data are needed from various types of language-use situations.

The real contrast takes place in the learner. Therefore the Finnish-English Cross-Language Project has seen it necessary to study the interaction between a Finnish speaker of English and a native speaker. Attention has been paid to factors that make it possible for the Finn to understand messages in English and to make himself understood (Sajavaara and Lehtonen 1980b, Sajavaara and Lehtonen (ed.) 1980). A careful comparison is needed of Finnish and native English speech and of communicative behaviour in both Finnish and English by the same Finnish informants.

Impromptu speech and CA

Pure impromptu speech poses a problem to the researcher, because observation of naturalistic impromptu speech is not easy. Moreover, it is more or less impossible to create two similar communicative situations cross-linguistically for contrastive purposes. Thus, the type of study which seems to be possible experimentally is the extension of traditional contrastive methodology from elements of grammar to elements of discourse.

One of the most interesting 'contrastive' problems seems to be the existence of scripts to deal with certain types of situations. Such scripts are known to be heavily culture-bound, which raises interesting problems of a contrastive nature within an expanded framework of cross-language communication analysis.

Within the Finnish-English Cross-Language Project, aspects of contrastive discourse analysis were taken up by Ventola (1980). Her data were based on audiotaped casual conversations in Finland and Australia, and she was concerned with conversation management devices. A great deal of her material comes as close to impromptu speech as is normally possible. The study is not contrastive discourse analysis exactly in the sense in which it has been presented above, but it gives important insights into how certain aspects of casual conversation are structured in English and Finnish and what sort of devices are used by the interactants in certain phases of interactional discourse to serve certain conversational functions. Her data indicate, for instance, that "the Finns were more concerned about emphasizing and making their point clear when constructing their move, while the English speakers paid more attention to expressing their ideas tentatively – it could perhaps be said that they avoided presenting 'attacking' opinions" (Ventola 1980: 134). Moreover, the English speakers seem to pay more attention to their interlocutors' reactions to their speech: they wanted to make sure that the interlocutors understood the moves, while the Finns were more concerned with clarifications. The Finns also seemed to rely more on shared information. Ventola's data also shows that the communication management devices used to structure discourse were to a great extent similar in both of the two languages. The English speakers' feedback moves were slightly more frequent than those of the Finnish speakers.

The Finnish project has also included studies in discourse management devices, both verbal and non-verbal, in seminar settings. Most of the speech situations like these cannot be described as impromptu, but a great deal of the information can be used as a background for a study of impromptu speech (see Saario 1980, Valokorpi 1980). In particular, features that seem to be of some relevance include various avoidance strategies and the way in which various linguistic and non-linguistic elements combine in communicative situations. It was seen, for instance, that Finnish speakers of English relied almost entirely on the verbal means to convey their meanings (Saario 1980.74), but on the whole the speakers who were more communicative and more 'proficient' in their Finnish were also so in English. For the most part, no greater differences were observed in communicative devices between Finnish and English. What there was there that was different can easily be explained as resulting from differences in the roles of the two groups of speakers: the native speakers of English were teachers, and the Finns were students.

Most of the discourse material is experimental. It is clearly task-oriented and thus highly intentional. Yet in discussions of this type there are phases where the interactants lapse into small talk, eg. when the task demands override the available potential, when something goes wrong, and when the interactants feel that they require a break. This type of impromptu speech is impossible in highly formal situations.

On the basis of the material that is available it seems that in impromptu speech situations the speakers have to rely either on various types of conversational routines or on prefabricated expressions, which require a minimum of processing capacity. Such routines seem to serve the function in several instances of reducing the processing load required for speech performance to give the speaker more time to think about the consequences of his interactant's move and to develop an adequate strategy to deal with the situation. Impromptu speech also serves the well-known function of gathering more information about the parameters relevant for the continuation of the interactional situation, more information about the other interactants, their background, the situation, etc. Otherwise the discourse remains either heavily verbally-oriented or phatic communion with zero content.

It is obvious that we need a more refined research methodology to deal with impromptu speech. The studies carried out by the Finnish project imply that experimental techniques are not totally out of place. A good candidate for the material collection technique is role play and drama.

Concluding remark

Contrastive studies in impromptu speech in two languages serve the important function of giving information about the ways in which the two language are used in communicative situations. Particular attention should be called to scripts and plans, which may reveal cultural differences. Nonverbal aspects, including pauses and hesitation phenomena, may reveal important differences in the ways in which speakers belonging to two different language communities deal with discourse data.

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Observations related to impromptu elements in classroom discourse and to the function of such elements in foreign language teaching and learning

Abstract. As a rule, classroom discourse in foreign language teaching and learning is fairly strictly formalized and, thus, does not contain impromptu speech. Discourse analysis, however, reveals that evaluative acts of teachers (follow-ups) as well as 'glides' which link one teacher-learner-exchange to the next do contain impromptu elements. They are, moreover, heavily dominated by the source language of the teacher (German). It is supposed that such impromptu elements in an otherwise formal discourse are (unintentionally) meant to exercise control over the learners' performance. – On the other hand, a general absence of impromptu speech in learners' utterances is obvious. It is supposed that classroom discourse does not give the learners a real chance to plan their utterances creatively. Thus, ironically, teachers are prone to use impromptu elements in classroom discourse in order to prevent their learners from using them themselves.

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This paper deals with observations related to impromptu elements in classroom discourse and to the function of such elements in foreign language teaching and learning. The topic will be dealt with under two aspects. One aspect concerns the use of impromptu speech by teachers when conversing with pupils in the foreign language and is based on empirical data which were collected and analysed at the University of Essen (Lörscher, forthcoming). The other aspect concerns impromptu speech as used – or rather as *not* used – by learners when conversing in the foreign language within the frame of a formal teaching situation, and to what degree this should be taught and can be taught. These observations, too, depend on the empirical data mentioned, though not by way of explaining what was found in them, but by way of commenting on phenomena which these data obviously lack.

The hypothesis underlying both aspects, and thus their common denominator, is the assumption that impromptu speech plays an important role in foreign language teaching and learning which, however, has so far been largely unnoticed.

1.1.

Difficult as impromptu speech is to define, it is certainly marked by features of spontaneity enacted in real time (essays in Dechert and Raupach 1980). This means that features of preparedness and of routine are lacking (Enkvist, in this volume). At first sight, it may, therefore, be doubtful whether impromptu speech is symptomatic of classroom discourse at all, because this type of discourse is known to be fairly strictly formalized and rigidly patterned (Sinclair and Coulthard 1975).

In order to gain insight into the structure of classroom discourse in foreign language teaching and learning, we video-taped several lessons, transcribed the discourse and analysed it with the help of Sinclair and Coulthard's (1975) model, which, however, was expanded and elaborated during the analysing process. The expansion mainly consists of defining more acts and finding means to describe subtler hierarchical relations than the original model supplies (Hüllen and Lörscher 1979; Lörscher, in press).

For this analytical study, a type of lesson was chosen which is very frequent in German schools. It consists of a conversation between teacher and class on a topic which is known to both of them from their previous work with texts. The technical term for this type of lesson is 'wiederholendes Unterrichtsgespräch' (repetition by conversation in class). It is supposed to approach natural communication. It holds a middle position between formal explanations (e.g. on grammar or on the meaning of words) or formal practising on the one hand, and free conversation on the other, which, however, is very rare in formal language teaching. The main feature of 'repetition by conversation in class' which sets it apart from natural conversation is its being tied to a previously given text.

Our material was analysed under several aspects, e.g. as to the relationship between utterances in class and the textbook, and as to its hierarchial structure. With reference to impromptu elements the following observations were made:

The most obvious features of discourse in foreign language classes prove it to be *not* impromptu. This applied, e.g., to the ritualization of openings and closings which, in most cases, violates the rules that govern natural openings and closings in everyday conversation (Schegloff 1972; Schegloff and Sacks 1973; Edmondson and House 1981).

Ritualized openings and closings in school are mainly determined by external factors: that the partners in conversation are, as a rule, one teacher and a whole class; that the teacher's role dominates the role of learners by virtue of his/her profession, age and knowledge; that the beginning and ending of discourse is set by a schedule; that proxemic relations between communicants underlie conventional rules; and so on.

These openings and closings, by virtue of their ritualization, are essentially L1. That is, even when given in the foreign language, they seem to belong to the institution 'school' in general and are no real part of foreign language communication. Except for individual and rather exceptional cases, they tend to belong to the pedagogic discourse, not to the target discourse (Edmondson and House 1981) in class. In these openings and closings German learners meet their German teacher in a German school, and this is why they are actually often verbalized in German, even with teachers who otherwise make a point of only using the foreign language.

Classroom discourse, furthermore, is structured by a rigid turn-taking system which, again, violates many rules that apply to natural conversation (Sacks *et al.* 1974). Nearly always turn-taking is organized in such a way that the current speaker (teacher) selects the next (learner), and that then the right to speak falls back on the first one (teacher). There are occasional deviations from this, which may be planned or which may just occur. How strictly the system is kept up depends on the age of the learners. As a rule, however, not even a class of grown-ups disputes the right of the teacher to speak whenever he/she wants to, a right which is supposed to be based on his/her didactic responsibility (Mehan 1979).

In its most typical form, discourse in a foreign language class consists of an elicitation uttered by the teacher and a response uttered by a pupil. The exchange between the two is then completed by a follow-up, an evaluative utterance by the teacher. The elicitation typically consists of a question, a fragmentary sentence, or just an utterance with some elicitative purpose. The learner's response meets this elicitation with an answer, the remainder of the sentence, or another utterance – all of them being speech acts whose semantic contents are previously given and whose syntactic structure is often – though not always – pre-patterned either by the next (in the memories of teacher and learners) or by the elicitation of the teacher. The special form of the elicitation may be planned in order to stimulate a certain response, e.g., a certain structure or lexical item. The verbalization of follow-ups will be returned to in section 1.2.

As a rule, the learners know of the match between elicitation and response; that is, they know what they are expected to say. Thus, neither the teacher's elicitation not the learner's responses are tokens of impromptu speech. Even if the teacher has not pre-planned his/her questions and does leave his/her learners a certain choice in their answers, there still is a set of constraints (created by the text, the teacher's general plan for the lesson and the learners' eagerness to say the right thing) whose interplay precludes free and impromptu speaking. This accounts for special features of didactic discourse which set it apart from natural discourse, e.g., its specific back channel items (Duncan 1974; Duncan and Niederehe 1974) and its lack of gambits (Edmondson and House 1981). Another highly important contribution to didactic discourse is given by those evaluative follow-ups which tell the learner about the quality of his/her performance in the judgement of the teacher and which seem to be indispensable. They give the classroom discourse a triple structure (Sinclair and Coulthard 1975, Coulthard 1978, Coulthard and Brazil 1979, Streeck 1979) in which elicitation – response is to be looked upon as one adjacency pair which then becomes the first part of a second adjacency pair consisting of elicitation/response and evaluation (Mehan 1978:42; Lörscher, forthcoming).

Items of impromptu speech may of course appear in classroom discourse, just as deviations from the triple structure do. But they are not characteristic and will even be looked upon as slips of the tongue which ought not to occur. This applies to teacher and learners alike.

1.2.

Our empirical data, however, show that the evaluative acts which regularly follow the elicitation-response pair are – contrary to elicitations and responses – strongly marked by impromptu features. These follow-ups are hardly ever realized by completed sentences. Instead words like 'yes', 'right', 'no', 'okay', 'wrong', 'well', 'ah', 'hm' are preferred. They are nearly always accompanied by distinct non-verbal signs like nodding, shaking one's head, gestures, facial expressions, body movements, steps etc. Typically, there are beginnings of sentences which are never completed, false starts, repetitions, filled pauses. There are also repetitions and chains of interjections.

In one stretch of discourse of 150 acts there occurred 43 evaluatives (plus 3 corrections of mistakes). They consisted of 'yes' (falling intonation), 'yes' (rising intonation), 'yes please', 'mhm', 'and' (rising intonation), 'right' (falling intonation), '(very) good', 'aha', and repetition of a constituent of the learner's utterance or of the whole utterance. Chains were linked together with up to three elements (like 'yes, right, okay'). These evaluatives were even inserted by the teacher when he himself had given an explanation, which means that he evaluated his own performance.

Two observations about the impromptu form of these evaluative acts could be made:

i. They are heavily dominated by the source language (in this case German) of the teacher. *Yes/Ja*, *right/richtig*, *wrong/falsch*, *no/nein*, *perhaps/vielleicht* occur particularly often with *yes* holding the absolute record, obviously triggered by the ambiguous and frequent *ja* as an interjection and *Abtönpartikel* in German. This interference of German impromptu elements also accounts for the total absence of expressions like *fine, I see, well done, good girl*, which can be heard time and again in genuine English classrooms.

Even teachers who normally make a point of conducting the entire conversation in English will fall back on German interjections like *ja*, *ach*, *aha*, *so*. Needless to say, the accompanying non-verbal signs are all German.

ii. It is typical of foreign language classroom discourse that evaluatives refer either to topical or to formal correctness of learners' utterances or to both at once. As topics usually are well-known or trivial, reference to formal correctness is much more frequent and obviously taken much more seriously than reference to topical correctness. Formal mistakes are looked upon as 'real' mistakes, whereas topical misunderstandings, if they occur, are more easily forgiven (Enkvist 1973).

It is obvious from our empirical data and from wide classroom observation that learners always know whether formal correctness or topical correctness or both are referred to by an evaluative act of their teacher. The store of impromptu elements is obviously distinctly differentiated into those which comment on formal correctness and those which comment on topical correctness. Positive evaluatives mostly refer to both, whereas negative evaluatives may refer to one or the other. Our empirical data have not yielded one single case of misunderstanding in this respect. Apart from the choice of special verbal elements, it obviously is the accompanying non-verbal sign which makes clear which sort of evaluative act was intended.

The choice of impromptu elements for follow-ups seems to be highly idiosyncratic. In this respect, teachers differ widely in their communicative means and pupils seem to get used to their teacher's kind of evaluation of their work fairly quickly.

With the sequence of elicitation/response-evaluative being the essential exchange unit in classroom discourse, gliding over from the evaluative follow-up to the next elicitation, which opens the next unit, gains particular importance. It is the point in classroom discourse where a step forward is made and which, therefore, is most important for teacher and learners alike. This glide is very often realized as a planning pause (empty or filled) and contains more false starts, repetitions and interjections than usual. Most frequent is the word *yes*, obviously again an intruder from German. It is often very difficult to distinguish where the evaluative of the previous unit ends and the glide to the next unit begins. Again, learners seem to understand this link between the previous and the next exchange of classroom discourse very well.

1.3

Linguistic analysis of discourse in foreign language classes, as far as it has been described here, yields an interesting system of communication with the evaluatives and glides as important items. At least four functions may be attributed to them:

i. They are planning spans for the teacher. In particular repetition of constituents or whole utterances of learners give him/her time to plan and start performing his/her next elicitation.

ii. They act as a lubricant for the discourse. They make elicitations and responses follow each other smoothly and in a manner which does not place too much stress on the learners.

iii. They fulfil a distinct didactic purpose in that they give reinforcement and/or motivation and/or information to the learner.

iv. They manipulate the learners' attention and their awareness of what is happening in class. They do this by giving confidence with the help of (positive) evaluation and by arousing their attention for the next elicitation.

Which of these functions prevail and in which relationship they stand to each other needs further clarification. Here, too, idiosyncrasies of teachers may be found. One way to clarify all this is to have learners evaluate and explain their own and their teacher's behaviour after it has been videotaped.

Our data and our observations of general classroom behaviour make us assume that the fourth function could be the most important one and might be a key for the understanding of what happens in a foreign language class. Notice that all this happens in German surroundings, within a German school. This gives a fictitious character to the conversational exchanges in a foreign language, and because of this, pupils obviously depend heavily on the reaction of their teachers to their own performance. In contrast to everyday conversation in their own language, learners expect to be either acknowledged or corrected. This evaluation is rendered in English – as is everything else – but in a special kind of English which, contrary to the elicitation/response interplay, is stamped by impromptu elements and by the source language of teacher and learners. Impromptu performance seems nearest to the linguistic personality of everyone involved and, thus, more susceptible to their source language than other parts of the discourse. There seems to appear a basic mutual understanding between teacher and learners about the classroom situation and what goes on there. Its signs are the ritualized openings and closings as well as the impromptu acts and possibly other elements. The elicitation/response exchanges in the foreign language are embraced by this understanding and would probably not function if it failed (Hüllen 1976: 32-47). One of the difficulties German learners of English encounter when they first meet a native speaker (inside or outside the classroom) is that there are different evaluatives of what goes on and whether their performance in a foreign language was right or wrong.

2.1

The point of departure for the second aspect under which the form and functions of impromptu elements in classroom discourse is to be considered is the conspicuous absence of such elements in learners' utterances. What we found frequently were hesitation phenomena – as a rule, filled pauses – within the first constituent of after subordinated clauses. Occasionally, constituents were repeated (Fathman 1980). We did not carry out exact investigations into location and frequency of such and other phenomena, comparing L1 and L2 performance in this respect. But it is our distinct impression that impromptu elements are comparatively rare in foreign-language use. One reason for this is the fact that learners' responses mostly consist of one sentence or even one constituent of a sentence only; moreover, teachers seem to look at such behaviour with suspicion because they tend to make learners repeat their utterances whenever impromptu interruptions occur.

2.2

Communication may be defined as rule-governed behaviour. It can be broken down into two time-related phases: the planning phase and the realization phase (Faerch/Kasper 1980). The planning phase embraces the setting up of a communicative goal, the planning process and the actual plan; the realization phase embraces the plan, the realization process and the action of speaking or writing itself. It is difficult to describe the complex patterns of interaction within these two phases; it is also difficult to find out the exact timing between them, because realization of a speech utterance is, at the same time, a feed-back for the planning process and may lead to re-planning.

The planning process, as well as the realization process, are potentially conscious. Problem-oriented anticipation of difficulties in realizing the plan and getting the realization process on its way leads to certain strategies by which the foreign-language producer tries either to avoid or to overcome the difficulties which he/she faces (Bausch/Kasper 1979, Faerch/Kasper 1980). If there are no difficulties envisaged the whole process goes on automatically.

So far, it is very difficult to attribute particular phenomena of verbal behaviour to particular phases between setting the goal and carrying out the action. It is safe, however, to say that the phenomena of impromptu speech indicate the strategies of planning and realizing speech. The more accurately the path from the communicative goal via the planning process to the plan and via the realization process to the action has been worked out, the less impromptu the utterance will be. Putting it the other way round: impromptu phenomena betray that a speaker is still somewhere on his/her way between the goal and the action; that he/she anticipates difficulties and rearranges his/her planning; that he/she is finally successful or not. The overt language product is an indicator of the covert process that makes it (Seliger 1980).

It is unclear to what extent the traces of mental planning in the linguistic utterance are speaker specific or learner specific. Time-related phenomena seem to be typical for all language producers; semantic phenomena, however, seem to be significant for the learner's impromptu speech. To the latter belong substitution of general words for (unknown) particular ones which occurs after hesitation phenomena or pauses, impromptu ways of paraphrase and word coinage, code switching, and communication with non-verbal means (Bausch, forthcoming).

If we analyse our observations relating to the nature of learners' speech in formal settings in relation to this general theoretical background, we can venture the following general statements:

i. In formal situations, learners are hardly ever able to go through all phases, from setting a communicative goal to planning and speaking. The procedures of teaching favour a speech performance in which the finding of semantic concepts and the communicative intentions is not the decision of learners, but is predetermined for them by the teacher, the textbook or other determinants. Frequently, even the choice of lexical and syntactic means for an utterance is limited by gradation. This prevents learners from scanning their linguistic resources when planning speech (Hüllen, in press).

One consequence of this type of teaching is that learners' utterances frequently sound so much more correct than utterances of native speakers. It is, however, a perfection which is achieved at the cost of creativity. If, as was postulated, impromptu features indicate normal mental procedures in speech production, it follows from this that such features are an important part of learners' interlanguage.

From this, again, it follows that learners must not be spared the steps from setting the goal to the action of speaking or writing, because only in going through this mental procedure can they find the necessary hypothetical rules, test them, find them confirmed or rejected, and thus develop them into correct generalizations. The narrow path along which learners are often led by over-conscientious teachers may cause them to utter correct sentences, but it may prevent them from learning how these correct sentences are arrived at mentally under normal communicative circumstances.

ii. The distinction has been made between 'correctors' and 'planners', and it is one which corresponds to the distinction between 'high input generators' and 'low input generators' (Seliger 1980). The role of both types of language users in L1 need not concern us here. For the use of L2 it is important to notice that the teaching practice we are referring to seems to breed 'planners' and 'low input generators'. However, 'corrected' speech is much more redundant than 'planned' speech, which means that the former is more easily understood (Seleskovitch, in this volume). An utterance which carries the traces of its being planned along with it gives the receiver ample opportunities to follow the putting together of its structure, to anticipate its chain of forms and guess its meaning. An utterance which comes out perfect, on the other hand, only allows the receiver to follow its flow step by step.

Thus, foreign-language teaching is prone to produce less redundant and less understandable language, which certainly cannot be the intention of teachers. There may also be cultural side-effects that accompany the one or the other type of utterance. It is difficult to say anything that has been empirically proved about this, but some observations suggest that it is not linguistic perfection that arouses sympathy and strengthens the will to communicate (Beneke 1980).

iii. The reason why restructuring is so rare in learners' language may become more apparent on closer examination. With practice in impromptu techniques it is perhaps possible for the speaker of a foreign language to develop the confidence that is present in first-language usage. With this confidence, a speaker can tolerate an utterance break-down because of the knowledge that restructuring is possible. In using a foreign language, speakers are often reluctant or afraid to do this because they fear that efter the first difficulty they may encounter more serious ones. It does not seem feasible to teach impromptu techniques, because their very nature restricts this. But is does seem advisable that learners in formal teaching settings find much more room to use them (Edmondson/House 1981).

When learners leave the secluded classroom and face unprotected everyday communication, a certain shock probably cannot be completely avoided. It is the teacher's task to prepare them for this shock; therefore, learners should, at least occasionally, be encouraged to use strategies which are learner specific, such as lexical substitution from one's own language and literal translation.

3.

Our observations relating to impromptu elements in classroom discourse and to the functions of such elements in foreign-language teaching and learning show the – up to now – undiscovered importance of this kind of speech both for the teacher/learner contact and for the development of learners' abilities. It is an ironic twist that teachers should use impromptu elements in order to control classroom discourse in a very special way and, by the very act of doing this, should more or less prevent their students from learning them. This does not, of course, imply any criticism of teachers, who are probably unaware of these intricacies. It does, however, imply the necessity of envisaging new teaching methods which give learners ample room to learn creatively.

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Why impromptu speech is easy to understand

Abstract: This paper deals with the consequences of the concomitance of ideation and expression in the impromptu speaker. The tangible marks left on speech by ideation are discussed, as well as the effect these marks have on the listener's perception and comprehension of the speaker's meaning.

Introduction

Anyone with the least experience in listening to speeches such as those delivered during international conferences can bear witness to the fact that the sense of an improvised (i.e. unscripted) speech is easier to understand than that of a speech drafted in advance and read aloud or recited by heart.

But what are the reasons for this phenomenon?

In an attempt to answer this question, I conducted a study of the incidence of the form of delivery on the comprehension of professional interpreters during simultaneous interpretation.

Simultaneous interpretation is, in fact, a particularly interesting sphere of investigation because of the interpreter's heightened sensitivity to any factor interfering with an immediate comprehension of the speaker's meaning. This sensitivity is the result of three implications of simultaneous interpretation not present – at least not all present at one time – in other communication processes.

In the first place, the simultaneous interpreter is at once both listener and speaker. This double function divides his attention and requires that the speaker's meaning be easily apprehensible, all the more so since it must be grasped instantaneously.

Secondly, the interpreter acts as receiver of a message intended for someone else (Moskowitz, 1973). He must instantly comprehend the sense of a speech designed to be understood, not by laymen such as himself, but by the expert to whom it is directed.

Finally, in spite of the aforementioned obstacles, the interpreter must fully understand the total sense of the utterances so that he can then restate it in his own words in the target language (Seleskovitch, 1968, 1975, 1976, 1977).

Simultaneous interpretation can thus reveal mental mechanisms of perception and comprehension operating in every listener, yet inaccessible to study until brought into evidence by an activity depending entirely upon them and sensitive to the least interference with them.

To conduct my study I recorded a number of speeches, both impromptu and read, delivered in French during the course of actual conferences. Their German interpretation was recorded on the same tapes.

In addition to this, I asked fifty of my colleagues, chosen at random, the following questions: Do you find the simultaneous interpretation of a speech read aloud to be more difficult than that of one that is improvised? If so, to what do you attribute this difficulty?

The interpreters were unanimous in their affirmative response to the first question. As for the second, the main reasons cited for the difficulties were:

- the speaker's reading aloud instead of thinking aloud (cited 28 times);
- speed of delivery during reading (cited 22 times);
- the monotonous tone produced by a reading (cited 26 times);
- the absence of redundancy in a written speech (cited 18 times).

Consideration of these results in the light of twenty years of experience as a professional interpreter led me to the following hypotheses:

– The facility of comprehension experienced by the listener during an impromptu speech is the result of the activity of *ideation,* that is to say, the elaboration and structuring of reasoning accomplished by the speaker as he improvises.

– Because the listener is unable to read the speaker's mind, this activity of ideation is imperceptible to him. He can only become aware of the speaker's reflection through certain tangible characteristics of his speech, and these tangible marks left on speech by ideation are what makes a communication more readily comprehensible.

– These marks are essentially *sentence segmentation, prosody* and *redundancy.*

1. Sentence Segmentation

An improvising speaker's rate of delivery in words per minute is not always slower than that of a speaker reading aloud, and in fact, can even be much faster. However, what I call the *objective* rate of delivery, because it is measurable, holds implications only for the speech as emitted by the speaker and bears little impact on the listener, for whom the rate of delivery is *subjective*.

This fact was clearly demonstrated in several instances by the striking discrepancies noted between the measured rate of delivery of the recorded speeches and the sensation of speed voiced by the interpreters who had translated them. Further evidence was provided by some of the recorded interpretations, which, in spite of a slow objective rate of delivery, revealed signs of increased stress due to the pressure caused by a lack of sufficient time. Inversely, the interpreters seemed relaxed at times even when the rate of delivery was rather fast.

Two factors account for the subjectivity of the listener's perception of the speed of delivery. The first of these is the degree of redundancy the speech holds for him. This aspect of the question will be treated in more detail in the section on redundancy.

Secondly, the sensation of speed experienced by the listener apparently depends largely on interruptions in speechflow. During examination of the recorded speeches it was found that the length of sentence segments (that is to say, the size of phrase sections located between two pauses) was smaller in the impromptu speeches than in those drafted in advance, even when the latter were read with a relatively slow rate of delivery. Sentence segments in the impromptu speeches contained from 1 to 9 words as opposed to from 3 to 23 words for texts read aloud. In the former case, most segments were composed of less than seven words, whereas in the latter there were generally more than seven.[1]

The primary reason for this difference is the conceptual effort furnished by an improvising speaker and the absence of such an effort when a text is read aloud. During impromptu speech, the process of ideation and the activity of expression are concomitant, yet selections made on the paradigmatic axis are not always instantaneous. This results in frequent interruptions in speech-flow, as pauses of hesitation are added to juncture pauses. Thus the activity of ideation is evidenced in speech through moments of hesitation which in turn reduce the number of words pronounced in a single segment.

According to my findings, the perception of short segments gives the listener the impression of a slower delivery than the perception of long segments, even if the objective rate of delivery is identical in both cases.

An explanation for this phenomenon may be provided by the limited capacity of auditory memory. To my knowledge, others (Peterson 1959, Baddeley and Warrington 1970, Delay 1970, Lieury 1975, Marfeld 1973, among others) have defined this capacity either by the memory span, measured by the number of words which can be restated after a single hearing, or by its duration, measured by the number of seconds during which the acoustic perception is remanent. In both cases the related experiments consisted of auditorially presenting various numbers of words, digits or syllables to subjects, and having them repeat each series immediately afterwards.

In my opinion, to obtain a clearer understanding of the capacity of auditory memory, total retention time should be divided into two periods: the period during which perception occurs and the period during which what has been perceived is still remanent. For example, a few seconds are needed to perceive the series of digits 8 9 4 7 6 3 1, and during this time, each digit remains in the memory. Thus, the digit 8 is remanent while digits 9 4 7 6 3 1 are being perceived, 9 is retained during perception of 4 7 6 3 1, and so on. I call this first retention period *intra-perception remanence*.

After perception, the mnesic presence is extended for a few seconds, during which the entire series of digits can be mentally reheard. I use the term *post-perception remanence* to refer to this second period of the total retention time.

As several researchers have demonstrated, when the number of elements in a series exceeds a certain limit, it becomes impossible to conduct an integral second hearing of the perceived series (Miller 1956, Dallet 1964, Neisser, Hoening and Goldstein 1969, Mills and Martin 1974, 1975, Martin 1975). This limit appears to be about seven elements. Since the time needed for the emission of seven elements in these experiments was only a fraction of auditory memory's total retention duration as measured by other researchers, it seems probable that auditory memory capacity is *two-dimensional,* depending on the factors of *space* (span) *and time,* and that the latter factor is partially neutralized when the elemental extent of the perception exceeds the memory span.

The above-mentioned experiments measured auditory memory's retention capacity for series of elements lacking in meaning and followed only by silence. If, however, their results are applied to the perception and comprehension of meaningful utterances, then the total duration of remanence is no longer of interest to us, because the juncture or hesitation pauses occurring in real speech are generally much shorter than the normal period of post-perception remanence in the absence of renewed stimulation of the auditory memory. During normal listening conditions, the determining factor is the retention of each perceived segment in its entirety during the juncture or hesitation pause which follows it. If the auditory memory is to operate effectively during the audition of a speech, the length of these perceived sentence segments must not exceed the memory span, and the segments must be retained long enough to allow for the processing necessary to their comprehension.

At this point we will reconsider my observation that whatever the objective rate of delivery, a speech divided into segments containing less than seven words seems on the slow side to the listener, whereas one divided into segments of more than seven words seems rather rapid.

In my opinion this impression can be explained, at least in part, by the relationship between segment size and the scope of auditory memory. If segment size does not exceed the memory span, the meaning of each group of perceived elements may be apprehended during the pauses separating the segments, while all of the perceived elements are remanent. These pauses may also be used to consciously 'auscultate' the auditory memory, in an attempt to rehear a specific word or digit which did not contribute to meaning comprehension and which must thus be reintegrated into the apprehended sense of the utterance.

On the other hand, when the speech is made up of segments exceeding the auditory memory span, perception of the first part of the segment is, if not entirely, at least somewhat erased immediately afterwards by that of the remaining part. The first part of the segment is thus unable to undergo normal post-perception remanence processing. Consequently, if its meaning is to be understood, this comprehension must occur at the very moment of perception.

This lack of time available for congnitive processing is responsible for the listener's impression of fleeting perceptions, mistakenly attributed by him to the speaker's rate of delivery.

The incidence of speech-flow interruption in listener comprehension is an inverse function of the communications *redundancy* level for the listener, for two reasons.

To begin with, the less redundant the speech seems to him, the more diacritical elements he must perceive in order to grasp the speaker's meaning. In a speech holding little or no redundancy for the listener, the memory span will be automatically exceeded if the speech is divided into long segments. However, when the cognitive content of a communication is partially known to the listener, the quantity of linguistic elements that must be perceived in order for the speaker's meaning to be completely understood may well be within the scope of the memory span.

Secondly, the less the listener expects what he hears, the more comprehension tends to lag behind perception and to depend on the following pause. If part of the perception is erased before the pause, and thus before it can undergo the processing necessary to comprehension, understanding of the perceived utterance will be at best incomplete. This lag in comprehension becomes especially apparent when we hear a joke. Our comprehension and laughter occur not during the punch line, but after it, because the goal of the joke is to surprise us with an unexpected ending (no laughter without surprise!). If perception of the punch line were to be immediately erased by a following perception, there would undoubtedly be no laughter at all.

To sum up what has been said so far, evidence suggests that one of the characteristics of impromptu speech which facilitates listener comprehension is its division into short segments, as a result of the concomitance of the processes of ideation and expression.

II. Prosody

In general, one can tell from hearing only the first sentence of a speech whether it is improvised or read from a written text. However, in both cases the speaker usually pronounces his first sentence in a rather neutral voice which gives the listener no clue as to how lively or monotonous he can expect the coming speech to be.

These observations lead us to deduce the existence of a phenomenon independent of the quality of improvisation or reading. If we know from the first sentence that the speaker is reading, it is not because we have already evaluated the quality of his performance; we have not yet heard enough to make such an evaluation. Our certainty comes rather from a subtle difference in the characteristics of speech-flow as produced by an improvisation or by a text read aloud. Whereas the former seems to catch our attention, the read speech lacks relief, slipping by without penetrating our sense of hearing and without leaving an impact on it.

Although a text which is poorly read does accentuate the flatness of speech-flow, it is actually only adding to the effects of that factor mainly responsible for the type of speech-flow characteristic of a text read aloud: the lack of hesitation pauses.

In the preceding section on sentence segmentation it was seen that, because selections made on the paradigmatic axis are not always instantaneous, speech-flow during an improvisation is interrupted by frequent hesitation pauses. It appears that words which the speaker pronounces only after such a moment of hesitation often seem particularly stressed to the listener, as though they are pronounced with greater energy and more emphasis than the other words in the sentence, giving the statement a marked *'acoustic relief'*.

This acoustic relief appears to be conducive to the auditory perception of speech, and thus indirectly to comprehension of the speaker's meaning.

The following hypotheses attempt to explain the *formation of acoustic relief*.

– Hypothesis 1: The speaker deliberately stresses those words which, because of their perceived pertinence to comprehension of his meaning, have merited careful selection on the paradigmatic axis. The insistence with which they are pronounced is reinforced by the dynamism that the speaker confers on his thoughts through his will to express them.

During a reading, on the other hand, even if the reader thinks along with the text, the dynamic force of the thought is never as great as at the moment when it is first expressed, that is, when the speech is written. Consequently, the words are not stressed as intensely as during an improvisation, and acoustic relief is relatively weak.

– Hypothesis 2: Evidence suggests that hesitation pauses, especially when silent, also contribute *directly* to the formation of acoustic relief. Unlike juncture pauses, silent (or unfilled) hesitation pauses are generally accompanied by a momentary blocking of expiration. Consequently, the following word is pronounced under pressure from the breath held in during the pause. It seems probable that, just as in a hydraulic system the retention of water increases its potential force, so pressure from the retained breath builds up during the silent pause acting as its dam. When the dam gives way, the explosive release of the withheld breath creates a more marked stress on the word responsible for its retention.

This hypothesis is supported by evidence from one of the recordings studied: the interpretation of a speech read at a high objective rate of delivery (168 words per minute) and divided into segments of up to 23 words. The interpreter, obviously rushed, omits a large number of juncture pauses and uses his hesitation pauses for breathing. Because breathing is not blocked during the hesitation pauses, the acoustic relief is less pronounced than it ordinarily is in impromptu speech. The words following hesitation pauses are not particularly stressed, and the speech-flow bears more resemblance to that of a reading than an improvisation.

A second confirmation of this hypothesis may be obtained by noting the lesser effect of filled pauses on acoustic relief. While listening to the various recordings I observed that, in fact, words preceded by filled hesitation pauses seem to be pronounced with less stress than those following silent hesitation pauses. This phenomenon could be explained by the fact that expiration is not blocked during a filled pause. Thus, the word following the pause is emitted without the added force provided by the release of a retained breath.

– Hypothesis 3: There may be a further explanation for why silent hesitation pauses in particular contribute to the formation of the acoustic relief typical of improvisations. C. J. Darwin (1975) describes an experiment conducted by A. Cutler showing that the listener pays special attention to the word following a pause. Darwin suggests that the accentuation perceived by the listener does not necessarily depend on the actual stress given to the word, but rather on the prosodic pattern of the emission preceding it.

If we accept this hypothesis, it follows that since the hesitation pause, unlike the juncture pause, cannot be anticipated by the listener, its appearance increases his vigilance and sensitivity to possible accentuation of the following word, all the more so if the pause is silent.

Boomer and Dittman (1962) illustrated the listener's increased sensitivity to silent hesitation pauses as opposed to juncture pauses by showing that the former can be perceived from a duration of only 200 msec., whereas the latter are generally perceived after a duration of about one second.

If silent hesitation pauses draw the listener's attention even when they are of very short duration, it is not unlikely that the sound perceived following the pause seems to the listener to be pronounced with more force than a sound following another sound. Thus, a word preceded by a silent hesitation pause would seem to him to be more stressed than a word preceded by a filled pause or another word.

In summary, the acoustic relief specific to impromptu speech appears to be the result of a combination of factors: the dynamic force of a thought in the course of its first expression reinforces the stress that the speaker deliberately places on certain words. This stress is underlined by silent hesitation pauses, on the one hand, because of the momentary stoppage of breathing and subsequent explosive release of air which they provoke, and on the other, because of the contrast felt by the listener between the sound of the word and the silence preceding it.

What influence does acoustic relief have on the listener's perception and comprehension?

We have already seen that as a result of acoustic relief the speech-flow of an impromptu speech seems to catch one's ear, whereas an address read aloud seems to slide by flatly, even when it is not monotonous. It clearly follows that acoustic relief influences message perception and comprehension.

This influence may be explained by the fact that hesitation pauses generally precede content-words,[2] causing these semantic indicators to stand out in the speech-flow of an improvised address. This accentuation can only facilitate their perception, and consequently, comprehension of the speaker's meaning, since they are the words most pertinent to an understanding of that meaning.

It appears, in fact, that during perception of an utterance, it is mainly the content-words that are apprehended. The more familiar the listener is with the syntax of the language used, the less he will record the accompanying linguistic elements that serve to structure the message syntactically, since his knowledge of the given language allows him to reconstitute those elements at will. As a result, they are only noticed when incorrect.

This is especially apparent in the case of foreign language use. Once what Bodmer (1949) calls the 'traffic rules of language' are passively known, structural linguistic elements are no longer perceived during listening. Only content-words are actually perceived, and thus rapidly, and in general, accurately recorded by the memory. This process is illustrated by the fact that structure-words are subject to numerous and tenacious errors during expression in a foreign language, in my opinion because they generally pass unperceived. According to my experience, it is difficult to even deliberately pay attention to structure-words. A determined student may accomplish this only through much practice and intense concentration (Déjean Le Féal, 1976).

The listener, besides perceiving only content-words, does not pay equal attention to *every* content-word in a sentence. In order to understand the sense of a statement, he uses his knowledge of the subject being discussed to reason along with the speaker, or even to reason ahead of him. Thus, the only diacritical elements he extracts from the speech are those which allow him to line up his train of thought with the speaker's. As we have seen, those content-words which follow a speaker's hesitation pauses seem to be uttered with added stress partly because they have been deemed essential enough to merit careful selection on the paradigmatic axis. It is likely, therefore, that they will correspond to the very content-words selected by the listener as aids in following the speaker's train of thought.

We know that every perception implies an activity of *organization* and *structuring*. If the laws of perception as studied by the gestaltists are applied to speech perception (Hörmann, 1976), it follows that the words pertinent to meaning comprehension are perceived by the listener as figures situated against a background of accompanying words. The more relief these figures have to clearly differentiate them from the background, the better they will be perceived and analyzed by the listener. In other words, the marked acoustic relief of impromptu speech frees the listener from part of the activity of organization and structuring implied by perception, thus facilitating comprehension. In order to instantly apprehend the meaning of a message read aloud, on the other hand, the listener must make an effort analogous to that needed to grasp at a single glance the subject of a painting in which the principle figures and objects, described with vague outlines and faded colors, seem to blend into the background.

To sum up, it appears that the hesitation pauses characteristic of improvisations contribute to the formation of an acoustic relief particularly conducive to auditory perception, and thus to an instantaneous comprehension of the speaker's meaning.

III. Redundancy

What is meant by the term redundancy? Its definition includes both that redundancy inherent to language and that which appears at the level of meaning. Only the latter is likely to be lacking in written speeches, since the redundancy inherent to language, whether phonological, grammatical or morphological, can neither be increased nor diminished by the speaker. It is an integral part of the language system, and must be respected as such by those who express themselves in a given language. Only redundancy of meaning is variable, and likely to depend on whether a speech is improvised or written.

For this reason my discussion will be limited to redundancy of meaning, which will be treated under two headings: *accidental redundancy* and *deliberate redundancy*.

Accidental redundancy refers to errors occurring in the process of expression – restarts, repetitions, etc. – which, during improvisation, produce redundancy not intended by the speaker.[3]

One of the *causes* of accidental redundancy appears to be the *gap between the speaker's speed of ideation*, determined by the intellect and generally constant for a given subject, and his *rate of delivery*, which depends on temperament and emotional state.

When comparing the rate of delivery at the beginning and end of relatively long communications, I observed that it progressively increased, whereas the speed of ideation seemed to remain constant, or even decrease as a result of fatigue. Consequently, redundancy was greater towards the end of the communications.

The extent of the lag occurring between ideation speed and the rate of delivery is undoubtedly not the same for every individual, since some people express themselves more redundantly than others; yet passages illustrating this lag can be found in any improvisation.

Involuntary though it may be, this type of redundancy *plays an important role for the listener*, because by diluting the idea-content of statements it facilitates comprehension. Indeed when listening to a message, it is not the words that we are after, but the sense. Because redundancy increases only the *'word-envelope'* of idea-content, without increasing the actual number of ideas, the listener has more time to analyze the meanings he has just apprehended. A better comprehension results than when the listener's mind is packed with ideas which he does not have time to correctly process.

The time needed for analyses of the speaker's meaning is naturally not the same for every individual, but depends on the rapidity of his intellect, his concentration ability, and especially on the knowledge he has of the subject in question.

The importance of this knowledge of subject matter is by no means negligible. If the listener is to instantly grasp the sense of a statement, his knowledge of subject, speaker and circumstances must be mobilized and combined with the perceived meaning of the words to create a synthesis. This mobilization of knowledge is indispensable, first of all, for the correct word to be associated with an ambiguous sound wave. As Denes and Pinson (1970) have emphasized, sound waves produced by two pronunciations of the same word are not always identical, and inversely, waves produced by the pronunciation of different words may be very similar.

What is more, a certain anticipation on the part of the listener, based on his knowledge of the subject, is essential if he is to attribute the correct contextual significance to perceived words. How else could one explain that, in a discussion on corrosion, for example, when the English use the words 'iron' and 'ion' in a similar context and pronounce them identically, experts immediately know if they must understand 'iron' or 'ion', whereas the layman must rely on guesswork. If the expert's knowledge and anticipation did not enable him to attribute the proper meaning to the perceived sound, some device would have been long since developed to eliminate this kind of ambiguity during such discussions.

The sense understood by the listener is thus based on his preexisting knowledge on the one hand, and on indications given by the meaning of the words of the message on the other. However, even in the case of a listener who is an expert on the subject in question, physiological factors such as intellect, concentration ability and fatigue may limit the rapidity with which ideas can be processed. The time that the listener has available for analysis of the speaker's meaning is thus an important factor in comprehension.

Whereas the speaker can control accidental redundancy only indirectly, by increasing or diminishing the gap between his rate of delivery and speed of ideation, he can *directly use deliberate redundancy* to make himself better understood. Deliberate redundancy amplifies what is explicit in a speech as it diminishes what is implicit. An illustration of this is seen in the oral version of a report presented by one of the recorded speakers. He provides an explanation of the term 'réseau urbain', whereas its definition is only implied in the written version handed out before the speech.

Text	*Oral Version*
'Long de 177 km, le métro urbain comprend 16 lignes et 347 stations.'	'Le réseau urbain, contenu à l'intérieur de la ville de Paris, de l'ancienne ville de Paris, c'est-à-dire qui ne comporte pas la banlieu, a une longueur de 117 km; il comporte 16 lignes de métro et 347 stations.

To label this explanation as redundant implies that the listeners already know what is meant by 'métro urbain'. This was undoubtedly the case for Parisians listening to the message, and probably for the listeners from the provinces as well, but not nessarily for foreigners who may have been visiting Paris for the first time in their lives. We see from this that, unlike accidental redundancy, it cannot be judged according to objective criteria, but depends for every listener on the relation between what he already knows of the speaker's meaning and what the speaker communicates explicitly. The more the listener knows about a subject, the more redundant a speech on that subject seems to him, whereas the same speech may appear to be full of obscure implied meanings to a less informed listener.

In addition to his knowledge of the subject, another factor which can modify a listener's perception of redundancy is the *use* he makes *of that knowledge* to understand the speaker's meaning. A specialist with an expertise equivalent to the speaker's on a given subject understands the latter's intended meaning by using his knowledge to analyze the message's sense. If, however, he is inclined to allow his own knowledge and train of thought to take precedence over the speaker's, he may understand only what subject is being discussed, without immediately grasping *what the speaker is actually saying.* To get his ideas across to such a listener, the speaker must be more explicit than for someone who, possessing similar knowledge on the subject, uses it to apprehend the sense of the utterance. What the speaker says (as opposed to what he is speaking about) will inevitably seem more redundant to the latter. I refer to the listener's use of his knowledge on a subject to understand the speaker's meaning as his '*receptivity*'.

The listener's impression of the speaker's redundancy depends thus on how his knowledge and receptivity relate to what is explicit in the message.

Do improvising conference speakers and those presenting written texts take the audience's receptivity into equal account? It appears that whereas an impromptu speaker attempts to evaluate his listeners' knowledge and receptivity in order to be explicit enough to be understood without boring them, the conference speaker who writes his speech ahead of time considers only the listeners' knowledge and disregards the question of receptivity. This is because, when writing, he automatically addresses readers, even if he knows that his report will be presented orally.

One recorded speaker gave a clear demonstration of this when he read the following passage: '*Le premier objectif, c'est, en effet, d'opposer la politique du vécu à la politique du discours. Il faut en finir avec les ténors, avec les joutes oratoires...*'[4] Only after having read these sentences aloud did the speaker realize, with the help of the audience's laughter, that merely pronouncing these sentences behind a conference room microphone had imbued them with a meaning they did not have on paper. The speaker hurriedly added: '*et c'est très difficile à dire pour un homme derriere un micro.*'[5] If, while writing his speech, he had imagined himself speaking into a microphone before his audience, he would certainly have realized sooner the probable effect of this passage.

The listener, unlike the reader, perceives the sense of a message according to the circumstances in which it is pronounced. Because the speaker is in the same situation as himself, the listener assumes that the speech will take that situation into account.

The reader, on the other hand, does not consider the circumstances in which he is reading because he knows that they have no relation to the author's message. As for the latter, because he wants his text to be understood by all who read it, whatever their situation, he writes without taking his own circumstances into account.

The author does not consider his readers' receptivity any more than he considers his own situation. This would be impossible, since lacking any contact with them, he has no way of judging their receptivity. Besides, he can be relatively sure that his text will only be read by receptive readers. In general, the choice of reading material and the act of reading itself are initiatives for which the reader must be motivated by his interest in the author's ideas, or at least by his will to understand them. His receptivity is the only motivating force capable of making him continue through a text. If it falls beneath a certain limit, whether through lack of interest, fatigue, or for any other reason, the reader ceases his activity, because there is no longer any driving force.

For the listener, receptivity also acts as a motive force, since it is a condition for the act of listening. However, in certain cases, such as during international conferences, additional factors inherent to the situation may encourage the act of listening, even where there is a relatively low level of receptivity.

Let us take the example of an audience whose ideas on the problem under discussion are not in accord with those of the speaker. As readers, they would waste no time putting the text aside, not judging its content interesting enough to warrant examination. However, as listeners in the presence of a live speaker, their interest depends not only on what he says, but on how he says it, on his very presence, etc. Perhaps one member of the audience listens in the hope of refuting the speaker's arguments during the debate. He certainly would not read a text simply to be able to write a letter of disagreement to the author afterwards. Another may stay only to participate in the vote to be taken after the speech. Besides, it would be discourteous to get up and leave the room with the speech in progress. Whereas reading requires initiative and personal effort, listening to a speech is the easy alternative for a conference participant. Not to listen would require more motivation than to stay in the room and hear the speech.

The impromptu speaker, moved by a desire to communicate, attempts to make up for his listeners' lack of receptivity by explaining his ideas more explicitly. Thus, if his report must be presented at the end of a long session, he realizes that his audience may be too saturated to be fully receptive. As readers, they would probably save the next chapter for later. As listeners, they must choose between attending to the speech in spite of their fatigue, and missing out on it entirely. The speaker, probably sharing his listeners' fatigue, takes the disadvantageous circumstances into account by insisting on those ideas which seem most important to him, hoping that, thanks to this redundancy, they will be understood. And, in fact, even if the listener's attention wanders occasionally, this redundancy offers him a second, or even a third chance to grasp the essential points.

If the speaker had written out his report in advance, he could not have foreseen the conditions of its presentation. What is more, we have already seen that, as an author, he would have been addressing readers rather than listeners. The idea of making up for their lack of receptivity by being deliberately redundant would not have occurred to him. This is only natural, since the reader, if his fatigue does not cause him to put down the text altogether, can always back up and reread certain passages when he realizes that he has been sweeping over them without recording the meaning of the perceived words in his memory.

The listener, on the other hand, cannot back up. The speaker must therefore furnish him with an equivalent failsafe device in the form of redundancy.

As we have already seen in the example of the 'métro urbain', a conference speaker facing a live audience seems less confident of their knowledge on a given subject than when he is preparing a written speech. As an author, he apparently supposes that if an idea in his line of reasoning escapes the reader, a few moments of reflection will enable him to reconstruct the missing link. He considers that a good reader will frequently interrupt his reading to analyze the apprehended sense.

The listener, however, cannot indulge in such reflection without the risk of missing the following part of the speech. Thus, a conference speaker uses varying weights and measures when evaluating the knowledge of those to whom his message is directed, depending on whether he is writing his text or giving an impromptu speech. In the former case, he considers their knowledge and their capacity for reflection, whereas in the latter he takes their knowledge and receptivity into account, but does not rely on their capacity for reflection.

In summary, although deliberate redundancy is experienced subjectively by each listener as a function of his knowledge of the subject discussed and his receptivity, it is likely to be weaker for a given listener, all else being equal, when the speaker reads than when he improvises. In the latter case, the speaker deliberately increases his explicitness (as opposed to being unintentionally redundant) in an effort to communicate his ideas and to gain the attention of the flesh-and-blood listeners seated before him. Since any such on-the-spot increase in the speaker's explicitness can only result from a concomitant process of ideation, in the last analysis it is the latter which causes a speaker to make himself better understood. This explicitness compensates for the listener's inability to back up or to take a few moments of reflection and insures comprehension where it would otherwise have been compromised by a lack of receptivity or insufficient preexisting knowledge.

Conclusion

If we accept the hypothesis that the division of speech-flow into short segments, acoustic relief and both accidental and deliberate redundancy all have as their origin the concomitance of the processes of ideation and expression in the impromptu speaker, then we must conclude that it is the presence of all these characteristics at one time (a necessary consequence of their common origin) that helps the listener to understand the speaker's meaning. Singly, each of these tangible manifestations of ideation would undoubtedly have little effect on comprehension; combined, they allow the listener to easily and instantly grasp the speaker's meaning. Because these marks left on speech by ideation affect both perception and comprehension of messages, the entire processing of language is facilitated.

On the other hand, this same hypothesis leads us to ask if one can term 'act of communication' a speech read aloud, which (with only rare exceptions) demands an intense effort on the part of the listener, who must process poorly structured perceptions without auditory memory's usual aid in order to instantly grasp complex reasoning contained in the barest of word envelopes. Isn't this rather a challenge thrown out at the audience? Can oral communication in the true sense of the term really exist in the absence of respect for the natural laws governing language perception and comprehension?

NOTES

1. Excerpts from two recorded speeches are presented here to illustrate speech-flow interruption during an impromptu speech and during a reading. The pauses are marked by slant lines:

Impromptu speech

'Jusqu'à présent/ les organismes d'intervention/ en matière de sucre/ tout au moins/ étaient des organismes/ passifs/ qui avaient pour/ objet/ d'acheter le sucre/ qui leur était proposé au prix/ d'intervention/ Par le jeu de l'article 9 bis/ ces organismes/ vont perdre leur caractère d'organismes passifs/ Ils vont/ devenir des organismes actifs/ qui vont prendre place sur le marché/ et acheter du sucre/ en principe/ aux conditions/ du marché/'

Text read aloud

'Résultat: aux parlements les femmes restent minoritaires. Les parlements sont toujours et encore des clubs masculins. Je ne citerai pas d'exemples étrangers/ pour ne pas être discourtois/ mais je citerai simplement l'exemple français: en France, 9 femmes députées sur 490 députés/ Est-ce assez? Bien sûr non/ Les femmes au gouvernement sont encore plus rares, même si le cas se vérifie moins, heureusement, en France aujourd'hui/ Mais dans beaucoup de pays du monde, on ne trouve aucune femme au gouvernement, voire plus simplement/ une seule femme/ Un peu comme si le mot ministre, après tout, ignorait le féminin pluriel/'

2. This fact, mentioned by several authors (Goldman-Eisler 1958, Tannenbaum, Williams, Hillier 1965 etc) was recently confirmed by an in-depth statistical analysis of hesitation phenomena conducted by Faure (1978).
3. A brief excerpt from one of the recorded improvisations is presented here as an example:
'On se trouvait ... on s'est trouvé depuis quelques années au début d'une ... au début d'une ère ... pas d'une ère nouvelle, c'est beaucoup dire, mais quand même d'un ... d'un dynamisme technique et commercial ... d'un dynamisme technique et commercial tout à fait nouveau du transport ferroviaire.'
4. 'The first objective is, in fact, to oppose the politics of real life to the politics of speech-making. We must have done with star orators, with contests in eloquence...'
5. 'and for a man behind a microphone that's not easy to say.'

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Impromptu speech and oral translation

For the oral translator (or interpreter) there are three types of discourse: (1) written texts that are normally dealt with in writing but have sometimes to be translated orally (sight translation), (2) written texts read out at international conferences, and (3) impromptu speeches. I shall disregard sight translation and deal only with aural translation, i.e. impromptu speeches and speeches read out from manuscripts. To the interpreter the difference between the two is tremendous. Impromptu speech is readily understood and translated, while prepared speeches make greater demands on him and prove less amenable to successful rendering. This is mainly due to speech production: words delivered from a prepared text come from the conversion of visual perception to sounds, while word sequences delivered in impromptu speech are generated by the thinking activity that goes on in the speaker's mind.

In this paper I shall examine various features of impromptu speeches that are shown by translation to be connected not only with language but also with the speaker's and the listener's cognitive activities. I shall also endeavor to show that extemporaneity has an influence both on enunciation and formulation.

Impromptu speech is communication and has therefore to be considered in its interactive effects with receptors. In impromptu speech *prosodics* play a more prominent role than in prepared speeches, and add a great deal to the meaning, the sound patterns we connect with *syntactic rules* are not always as expected, but what to the grammarians would appear as deviances are to the interpreter clues to the speaker's meandering thoughts. The sounds of *lexical items* merge within the auditory verbal span: this means that there is hardly any possibility of individual identification prior to the understanding of a sense entity, so that the ambiguity of individual words or clauses is avoided. Finally non-linguistic carriers of sense such as *mimics and gestures* are abundantly present in impromptu speech, sometimes even outweighing the semantic components of speech in determining sense for the hearer. But differences do not stop here, and I shall deal mainly with the following: impromptu speech is *heard only once*, at a rate of perception that depends on the *speaker's delivery*, and it is specifically *adapted to the listeners*. All these features trigger off cognitive activities that facilitate translation.

Oral translation

Studies of interpretation have shown that in adequate oral translation the sounds issued by a speaker are processed by the interpreter with a cognitive result that is largely non -verbal. Understanding results in an awareness of non-verbal sense, and translating consists in putting that sense into words in another language, some direct passage from word to word occurs, but no oral translation is ever carried out as a whole on a word-to-word basis. The non-verbal character of sense is testifies by the fact that consecutive interpreters sometimes happen to forget which language they heard, so that instead of translating they start rewording the speech in the same language. Lederer (1976) has termed 'units of sense' the successive conceptual entities produced in auditory memory that gradually build up into a coherent discourse.

Let us take as an example of translation under such conditions an utterance made by the President of the Thomas Alva Edison Foundation: "Thomas Alva Edison was a pragmatist and a realist. In working with the incandescent lamp, his aim was to produce light in a more convenient form and at a lower cost than the gas utilities of his time could. He figured to the penny the cost of providing a single gas flame in a single home and made that his target for electric lighting.

That kind of economic realism, coupled with creativity and a willingness to take risks"...

and its French oral translation.

"Thomas Alva Edison était homme d'action et réaliste. En travaillant à la mise au point de sa lampe incandescente, il cherchait à produire une lumière moins coûteuse et d'emploi plus commode que celle fournie par le gaz. Il avait évalué au centime près le coût par bec de gaz et par foyer de l'éclairage au gaz et entendait ne pas le dépasser.

Ce réalisme économique, doublé d'un esprit d'invention et du courage de prendre des risques..."

Here is the last sentence again:

That kind of economic realism, *coupled* with *creativity* and *a willingness to take risks...*

(French). Ce réalisme économique, *doublé* d'un *esprit d'invention* et du *courage de prendre des risques...*

Obviously the French here is the result of breaking up a cognitive awareness that is non-verbal: *esprit d'invention* does not derive directly from *creativity*, nor *doublé* from *coupled* or *courage* from *willingness*. The process does not involve a word-for-word substitution but an interpretation drawing on the whole of the linguistic and non-verbal knowledge that is temporarily stored as a cognitive trace in the mind.

Impromptu speech is *heard only once;* it either fails to awaken any sense, leaving one only with a faint impression of the man who spoke while the sounds he uttered fade away or it puts across a message. There are varying degrees to which a message may be understood, but what is left behind after language has disappeared is always a cognitive trace; and this is shown by translation. The *rate of delivery* of impromptu speech is adjusted to the shaping of sense in the speaker's mind and consequently to the way his mind works. He aims at communicating; his delivery therefore depends on the way ideas and emotions surge and not on deliberate focusing on enunciation. His listeners' understanding is in line with his own.

In the case of prepared speeches, it requires a good actor for delivery to match the cognitive and emotional activities that take place spontaneously in an impromptu speaker's mind. Otherwise the presentation is poorly adapted prosodically, too slow or too hurried. In some cases the delivery of prepared texts is so slow that the hearer's mind lingers on on individual words, summoning up various meanings and losing the thread of ideas. This happens sometimes in reading: the reader's uptake of information is done at his own rhythm. Unlike auditory perception that has to cling to the speaker's rate of delivery or lose track of what he is saying, eye perception can isolate series of words and cut them off from their verbal and cognitive context; the mind can toy with them as it wishes and, while the cognitive awareness of entities fades away, multiple language meanings appear. Writers often make use of this kind of specificity of sight perception to load their writing with double or triple meanings.

When a written text is being oralized, delivery is often too quick, leaving no time for the sense to be fully grasped, as hardly any cognitive associations occur, or, if they do in places, it will be at the expense of other passages in the speech.

The lack of impromptuness in delivery diminishes the listener's cognitive awareness in a commensurate way with the speaker's. Adequate delivery, i.e. an emission of sounds that reflects the thinking process in the speaker's mind, is one of the major reasons why impromptu speech is easier to understand than prepared speech and why interpreters always insist on speakers speaking extemporaneously.

Adjustment to audience and cognitive complements

Adjustment to the audience is a characteristic of here-and-now utterances; they develop along a pattern which takes into account the time and place of delivery and supposes that topical knowledge is largely shared by the audience.

Impromptu speech is highly planned cognitively; we know what we want to impart before opening our mouths to speak; however, the individual units of sense are not planned, neither sequentially nor in their individual composition, but shaped in accordance with the feel we get of our audience. Our speech adjusts linearly to our interlocutors; we see them, we react to their mimics; we dwell on the points which seem to be poorly understood, while omitting shared knowledge where repetition would be tiresome. We are aware at a preconscious level not only of our listeners' knowledge of language but also of their knowledge of relevant information pertaining to the subject under discussion, and we fit our words into that knowledge; we adjust the degree of explicitness to the degree of familiarity with the information we expect from our listeners, we choose our words in accordance with circumstances – festive or mundane, we adapt them to our social status vis à vis our interlocutors – giving instructions or asking for them, etc...

The speaker expects to find not only knowledge of language but also general and background knowledge into which to fit his words and this is matched on the listener's side by the intuitive feeling that he cannot understand speech on the basis of language competence alone but that he will also need topical knowledge. Lederer (1976) and myself (1976, 1977) have repeatedly shown that extra-linguistic information has to be added to semantics to produce a sense and is necessary for a speech to be translatable. The role of such *cognitive complements* can be made clear in situations where a by-stander observes impromptu speech without being involved in it; it then appears clearly that we communicate only when language and cognition merge.

The greatest difficulty for translators is to muster the necessary cognitive complements, the lack of which is far more thwarting than the lack of a lexical item here or there to which verbal context usually lends a meaning. Here is an instance of an utterance which cannot be correctly translated even though its language can be understood, because cognitive complements are missing. These are the first words, obviously impromptu, of a speech by President Carter: "My instructions were to be here at three o'clock, and I think I am right on time. But I think you all know that I've been providing employment for the Attorney General for the last two years or so – as a favor to the people of Georgia (laughter) – and the country –, and I think to keep him busy for a few minutes is not out of keeping with our relationship in the last few months."

We understand the language but the utterance does not make sense, as evidenced by the fact that no reader of this text would have laughed at the point shown as having actually raised laughter. We fail to understand this act of speech because we are unable to rely on anything but our linguistic competence while speeches imply as much if not more than they state explicitly.

Explicit wording is only the tip of an iceberg the main body of which is not visible, yet very much present in the speaker's and in the listener's minds. All speech acts emerge from a body of knowledge that remains unsaid and merge at the other end of the communication chain with the listener's knowledge and experience. Meaningfulness of speech is not only dependent on the characteristics of speech as such, it is also contingent upon the speaker's adjustment to his audience's knowledge and on the listener's ability to make sense out of the sounds he receives.

The adjustment of speech to audience is particularly noticeable in impromptu speech where the speaker – hearer relationship is an intimate one; situational perception is implied by the speaker and taken into account by the listener; impromptu speech is not autonomous, but part of a series of verbal exchanges where a large amount of common cognitive memories accumulate, constituting a cognitive context implied by the speaker and summoned by the listener. The merging of utterances with cognitive context and general knowledge contrives to produce sense. In human translation this sense gives rise to none of the difficulties experienced by machine translation which, as it deals only with language, finds it difficult to distinguish between identical syntactic structures such as *He washed the dishes with Omo* and *He washed the dishes with Susan*. In the human mind the words merge with background knowledge and the relevant meaning appears spontaneously.

Ambiguities

Some psychologists and linguists claim that speech is ambiguous because language is ambiguous; they say that words crop up in utterances with all their facets of meaning and that irrelevant ones have to be rejected on the basis of context. I submit that the claim should be reversed; there are no random ambiguities in speech acts; the dynamics of impromptu speech are such that utterances carry unequivocal sense; ambiguities are artefacts introduced into speech acts post factum, because all the parameters that distinguish them from language in isolation have been eliminated. By this I mean that in impromptu speech additional, cognitive information is available, there is a single issuance of speech and the rate of delivery is such that no trace is left of the actual words spoken. When these are removed, ambiguity is created. Words and sentences in isolation are always equivocal, while speech carries unequivocal sense as long as it is treated as speech and not as language. Let me take as an example an event at my office at Paris University. I am trying to reach the Head of another Department over the phone in order to settle an administrative point raised by the student sitting opposite me; hearing the reply I put down the phone and turn to the student saying: *"The secretary says she is sick"*. My utterance is perfectly clear to him, because it merges with situational awareness, i.e. with knowledge that is either already stored in his memory (he knows I am trying to reach a female colleague) – or is being perceived together with the utterance (I am putting down the phone without further inquiries); he understands I could not get her so when he hears: *"she is sick"* he knows to whom this refers. Had the sentence been analysed in isolation, three possible interpretations might have been given.

1) A (female) says X (female) is sick;
2) A (female) says she herself is sick;
3) B (male) says X (female) is sick.

It might be argued that my student was unaware of the sex of the person I was talking to over the phone so that *secretary* did remain ambiguous. In fact neither of the two possible genders of *secretary* was activated; the only part of the semantic potential attached to *secretary* that reached him was the function of a person who answers the phone.

Language ambiguity remains unnoticed in speech; here, there is simply no awareness of sex, translation would have made this perfectly clear: *"On me dit qu'elle est malade."* Language as described – speech as used.

Little discussion is devoted by psychologists and linguists to the dissociation of sounds and mental contents in utterances, the prevailing view being apparently that sounds, whether perceived in speeches or in isolation, always call for the same semantic contents. Language meanings and speech meanings are identified, English sounds are supposed to be producing English semantics, French sounds French semantics, with all attached shades of meaning, polysemy and ambiguity; nothing detracted from and nothing added to semantics.

I have repeatedly tried to show (Seleskovitch 1976, 1977, 1980) that this view, based on the unsupported evidence that speaking and understanding is an application of language competence only, is untenable. The evidence of oral translation is that speech sounds arise from mental associations between on the one hand proprioceptive and exteroceptive stimuli and on the other verbal and non-verbal memories, and that they arouse more sense in the listener than the sound/concept association of words and phrases in isolation.

We have also shown (Seleskovitch 1975, 1980, Lederer 1981) that part of the semantic potential of words and phrases is left dormant so that there is hardly any ambiguity or polysemy left in speech.

Speech meaning (sense) adds to and detracts from language meanings (semantics). Adding speech meanings to language semantics occurs as soon as words are not used to point to concepts but to point to specific realities. Detracting from language semantics occurs as soon as words or phrases are heard in verbal or cognitive context.

Take the grapheme *coupled* for instance. As long as it remains unspecified, it has a large number of potential meanings. Word translation would divide them up into several French words: *accouplé; associé; engrené; attelé; groupé; accroché; apparié; assemblé; emmanché; raccordé; embrayé* (HARRAP's French-English dictionary). (N.B. The French lexical equivalents do, of course, contain a number of semantic features over and above the ones that equate those present in the English word. Word translation always results in some irrelevant semantic features in the original being left out, while different irrelevant features are added to the translation. In context the non-relevant features on both sides remain dormant.)

In a specific context, *coupled* loses part of its polysemy, most meanings in above listing disappear: *automatic coupling of wagons = attelage automatique.* At the same time its specificity increases its referential meaning: *the coupler* has a jaw, a head, it claws on a buffer, etc.

Translation shows that human processing of utterances is not tantamount to the processing of words or sentences in isolation. Some language will always remain unaltered in impromptu speech; *automatic coupling* is so specific that it may always be translated correctly with *attelage automatique* in a given context, but most of the time specificity will require adding from non-verbal knowledge stored in the memory. Take the phrase *the cat was run over;* its language meaning is limited as compared with the meaning the same words would have as a piece of information for the loving owner of the cat; *the cat* in that case is a ten-year old, fat, black and white tomcat, his elderly master's only companion; the denotative meaning is vastly expanded, and what a wealth of connotations are aroused!

Let us take another example, the French word *écrire* which means about the same as the English *to write.* It does not include, over and above the act of writing, the object of writing or the act of mailing the writing, and yet when we say: *Je t'ai écrit*..., unless our interlocutor lives in the same house with us, he will understand we wrote him a letter and also that we mailed it to him.

Linguistically this is described as metonymy; cognitively it is an expansion of semantic values. The lack of ambiguity of speech acts combined with their considerable cognitive extension over the semantics of language is shown by translation whenever it is done correctly.

To show how cognitive elements are added to verbal elements in the understanding of impromptu speech, I shall quote an extract from a presidential campaign speech made in 1979 by Ted Kennedy before the Democratic primaries, and show the oral translation given in interpreting class and considered as adequate. Four instances of that translation will be discussed to show how knowledge stored in non verbal memory enlarges language meanings to referential meanings (sense):

I-1-" (. . .) In fact, the Russians have dominated Afghanistan not
2-for four weeks, but for 22 months. Years ago, Afghanistan
3-passed under Soviet influence. It passed behind the iron
4-curtain, not in 1980, but in 1978, with hardly a word of
5-regret from the Carter Administration.
II-6-When *two marxist regimes in Kabul failed* to put down
7-Afghan resistance, the Russians decided to install a third
8-regime and to put down the insurgency themselves. *Afghanis-*
9-*tan, as they saw it, was slipping away.*
III-10-President Carter confessed that he was "surprised" by
11-their action. *For many months, the Administration had*
12-*ignored the warning signals.* The American Ambassador to
13-Afghanistan was killed in Kabul last February while Soviet
14-military advisers looked on. We were aware well in advance
15-that *the Russians were massing their forces.* But the Admin-
16-istration said virtually nothing until after the invasion,
17-when they drew a line in the dust that was already rising
18-from the tread of Soviet tanks".

French translation:

I-1-" (. . .) En réalité la domination des Russes sur l'Afghanis-
2-tan s'exerce depuis près de deux ans et non depuis un mois
3-seulement. Il y a des années que l'Afghanistan est dans
4-l'orbite soviétique; c'est en 1978 et non en 1980 que ce

5-pays s'est retrouvé derrière le rideau de fer sans que l'ad-
6-ministration Carter aille au-delà d'une brève oraison funèbre.
II-7-*Après les deux échecs successifs des régimes d'inspiration*
8-*marxiste* à Kaboul, les Russes décidèrent de mettre en place
9-un troisième régime et d'étouffer eux-mêmes la rébellion.
10-*Ils avaient l'impression que l'Afghanistan leur échappait.*
III-11-Le Président Carter a reconnu avoir été pris de court par
12-cette action; or, *pendant des mois le Gouvernement s'était*
13-*refusé de prendre au sérieux les avertissements* qui se mul-
14-tipliaient – Ainsi, au mois de février l'Ambassadeur améri-
15-cain en Afghanistan était-il tué à Kaboul sous les yeux
16-des conseillers militaires soviétiques. Ainsi savions-nous
17-depuis longtemps que *les Russes massaient des troupes à la*
18-*frontière – procédaient à des concentrations de troupes,*
19-mais le Gouvernement ne s'en est ému qu'après l'invasion,
20-en une protestation qui s'est perdue dans le vacarme des
21-chars soviétiques.

The role of extra-linguistic knowledge in understanding impromptu speech is apparent in translation:

English II-6 says: "*When two Marxist regimes in Kabul failed...*
French II-7: *Après les deux échecs successifs...* Everybody listening to Kennedy knew the first marxist regime in Kabul had been toppled by a second one; the sequence of time is implied in English but clearly understood as shown in interpretation.

English II-9: *Afghanistan, as they saw it, was slipping away.*
French II-10: *Ils avaient l'impression que l'Afghanistan leur échappait.* The referential meaning of *as they saw it* here and now is not *à leurs yeux, selon eux*, or *d'après eux*, which would be correct language meaning equivalents but would referentially imply a mistaken, subjective assessment of the position. The referential meaning built up by cognitive complements is correctly *Ils avaient l'impression* because it shows the feeling of uncertainly that was theirs.

English III-11, 12: *For many months, the Administration had ignored the warning signals.*
French III-12, 13: *Pendant des mois, le Gouvernement s'était refusé à prendre au sérieux les avertissements qui se multipliaient.*

The language meaning of *ignore* can be rendered with many idioms, as is always the case with generic terms: *ignorer* (newly introduced in French with the English meaning), other wise: *choisir d'ignorer, ignorer délibérément, ne pas réagir, ne pas tenir compte de,* etc... The referential meaning here is translated: *se refuser à prendre au sérieux,* implying as it does in the original that the Administration did not believe that anything more serious would happen.

English III-15: *The Russians were massing their forces...*
French III-17, 18: first translation, rapidly corrected was given as: *Les Russes massaient des troupes à la frontière. Masser des troupes à la frontière* is a ready made sentence stored in the memory as an entity, probably evoked here because of the ressemblance of *massing* with *masser*; it was quickly corrected however because of the extra-linguistic memory that the Russians had brought in their troops by planes and helicopters from inside the Soviet Union; in a split second the cognitive awareness suggested another translation: *les Russes procédaient à des concentrations de troupes.*

The translation carried out here is based on an interpretation process which yields cognitive results. The interpretative process: emergence of single meanings or semantic features, and addition of extra-linguistic information, is mostly carried out at pre-conscious level, while the cognitive result is an awareness which, as such, can be paraphrased in different ways or translated into another language, There is always an interpretative process in acts of speech, be they written texts or minutely prepared discourses or impromptu speech, but it is particularly conspicuous in the latter where sounds leave littel trace in the memory as compared with the cognitive trace of interpreting. That cognitive trace then becomes all-important. It allows sentences to surface spontaneously and to hook up to each other on the basis of cognitive competence works hand in hand with language competence.

Thinking while speaking not only makes for an accord between prosodics and semantics but also between words chosen and things meant, principles stated and examples given, etc.

Once a communicative goal is in one's mind, cognitive competence allows for spontaneous build-up of ideas, while language competence releases speech-language as a behavioral response to cognitive activity. Units of meaning join together in a linear fashion, but their sequence is not premeditated; arguments do not follow neatly on each other as in written discourse; the reasoning is looser; individual points stem as much from the need to adjust or expand the meaning of a previous sentence as from the need for a tidy progression towards a final goal.

Impromptu speech is characterized by a constant interconnection between cognitive competence and language competence, between sense and prosodic, syntactic, lexical features. The Saussurian link between sounds and semantics, which is fundamental for language description, should not be applied as such to speeches. This link dissolves as soon as we open our mouths because whatever we mean to communicate, we can utter only sounds; and similarly the listener is reached by sounds only. Moreover the things we mean when uttering sounds, or the interpretation we give them as a listener, are drawn from the whole of our background knowledge, and not just from our knowledge of language; in speech we understand much more often referential meanings than language meanings, and therefore the link established is between sounds and *sense*.

Impromptu speech is the primary act of speech; it should stand first on the list of language studies as it is a natural communication act, involving cognitive activities on the part of both communication partners in addition to their language competence.

Oral translation is always impromptu as K. Déjean (1978) pointed out; it should as such stand first on the list of translation studies as it epitomizes the fundamentals of translating.

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Effects of some characteristics of impromptu speech on conference interpreting

Abstract. Conference interpreting is an oral impromptu activity. Since texts delivered at conferences range from unprepared oral texts to prepared written texts, there can be clashes between the impromptu features of conference interpreting and features of prepared written texts. Some of the information that aids the interpreter's work is the knowledge of the field of discourse and predictability of text structures.

Conference interpreting as an oral linguistic activity *par excellence* has often been investigated from the point of view of its impromptu characteristics. Here are some of the problems raised.

Goldman-Eisler (1968) views simultaneous interpretation in connection with the production and perception of spontaneous speech. She concludes that simultaneous interpretation, as a variety of spontaneous speech, proceeds in a rhythmic fashion and shows periods of high pausing (hesitant speech) alternating with periods of high fluency (fluent speech, less pausing) on a time axis. Each of these periods taken together (hesitancy + fluency) constitute psycholinguistic cycles of speech production: planning of speech and production of speech. During the pausing period, which is the planning part of the cycle, speech is less organized than during the fluency period; it was found that whereas during the fluency period pauses occurred at grammatically predictable points (constituent boundaries), the majority of pauses during the hesitant period occurred at non-grammatical points.

It is believed by many that this rhythmic character of spontaneous speech can be used to the advantage of the interpreter. One way is to crowd as much as possible of his speech into the pauses of the orator to avoid simultaneous listening and speaking, which is one of the major difficulties in simultaneous interpretation (Van Hoof 1962). But Gerver (1976) counters this claim by saying that the total proportion of pauses in relation to the total speech time is too small to effectively help the interpreter. Barik (1969) and Gerver (1971) have suggested that Ll pauses delineate units of meaning for the interpreter and help segment the input message. In this connection Goldman-Eisler

(1972) discusses some of the strategies interpreters adopt to segment the input. She mentions three ways in which the input can be segmented.

- encoding chunks of speech between pauses as they occur in the Ll message (identity);
- starting to encode before the Ll chunk has ended (fission);
- stringing two or more Ll chunks and then encoding (fusion).

She further found that the strategy adopted depended on the rate of the input message (more identity at faster rates) and the language from which the translation was done. Among the responses of six professional interpreters translating from and into English, French, and German she found 11% of identity, 48% of fission and 41% of fusion. She also discovered that owing to the nature of differences between the two languages, larger chunks were stored when translating from German into English because of the end-placement of the verb in German.

Some authors assume that the most typical input message in interpreting is a spontaneous monologue (cf. Minyar-Beloruchev 1969). It seems to me, on the contrary, that typical messages cover a wide spectrum of texts ranging from unprepared impromptu speech to the reading of a prepared written text. In addition, they can assume the form of a monologue or a dialogue. Below is a list of what I consider some of the typical input texts:

(1) a) a unprepared oral monologue or dialogue (a toast, a repartee, free discussion)
b) a semi-prepared oral monologue with notes (a lecture, a paper, etc.)
c) a written monologue intended for the spoken medium – reading thereof (a lecture, a report, a welcoming speech).
d) a written text intended for the written medium – reading thereof (a final communique, a resolution, a draft document, etc.).[1]

All of the four types of texts are common at any conference, but the first three seem to be predominant, text type (c) being probably the most common.

An interplay of these texts and their translation is, it seems, well-worth investigating from the point of view of the complexity of the task. I would like to concentrate on their prepared vs. impromptu character and especially on their written vs. spoken form.

It can be assumed that the output text produced by the interpreter has the form of extemporaneous speech. Since we know that the interpreter is the secondary source in the communication chain, we cannot very well speak of his performance as completely impromptu in the sense of 'unprepared, unplanned' because he follows the speaker's (primary source) text. Extemporaneous then means 'produced on the spot on the basis of a previously unknown text'. The term 'unknown text' also merits explanation: obviously we should assume previous knowledge by the interpreter of the field of discourse of the translated texts including the terminology, the topic of the conference, etc. By an 'unknown text' we mean concrete textual realizations of a previously known field of discourse. I believe that extemporaneous speech in this sense has most of the features of impromptu speech.

Only text types (a) and (b) can be thought as having features of impromptu speech because they have an on-the-spot character and are channelled through the spoken medium.[2] Text types (c) and (d) have features characteristic of written discourse.

In terms of differences between written and spoken discourse, and conceiving of translation in its broad, semiotic sense (as in Jakobson 1959 and Ludskanov 1973), we can distinguish the following transformational (= translational) processes as obtaining when the interpreter deals with the above text types:

(2) a) spoken discourse L1 → spoken discourse L2
b) spoken discourse L1 → spoken discourse L2
c) written discourse L1 → (spoken discourse L2)
→ written discourse L2
d) written discourse L1 → (spoken discourse L2)
→ written discourse L2

I would like to claim that processes of translating text types (a) and (b) are simpler than text types (c) and (d). This can be explained as follows: a spoken impromptu text in L1 with all the features characteristic of such type of text is translated into an equivalent text in L2. With text types (c) and (d) we have a more complex situation: written discourse is filtered through the spoken medium and can therefore be affected by features of spoken discourse. Linearly it can be represented by positing an intermediate stage of spoken discourse. The final stage is marked as written discourse L2, to suggest that all or almost all features of spoken discourse should be eliminated and what comes out should be a form equivalent of the L1 message, e.g. a resolution. Although it is translated orally by the interpreter, in L2 it should have all of the features of the original including its typical structures and terminology. In reality the relation obviously is not linear and the spoken-discourse stage can be obviated, especially by an experienced interpreter.

All this means is that since conference interpreting is effected through the spoken medium, and thus has an impromptu character, features of impromptu speech come to be present in the final product of translation.

Let us look et some of the traces of impromptu speech features in actual interpretation.[3]

A. Every sample of interpretation contains numerous instances of deviations from a fluent rendition of the text, characteristic of impromptu speech. Here are some varieties with examples:

(3) a) hesitation:
At the moment. . er. . both the nations. . er. . want. . er. .
to normalize their relations.
b) stuttering:
Panie Pre. . Pre. . Premierze [Mr. Prime Minister]
two coun. . two coun. . two countries
c) repetition:
friendly. . friendly relations
our. . our. . two nations
d) false start:
President Nixon's visit in our country on the. .
at the invitation of the Chinese government. . .
. . . when the common. . mm. . hopes will. . be. . mm. .
come true. . .

Such deviations yield evidence of the planning and monitoring of speech. The deviations in (a) - (c) are of the planning type. A hesitation or a pause is an indicator of thought processes connected with the selection of a word, a phrase or a construction to fit the preceding material. They can be subsumed under planning because they precede the enunciation of the following part. Stuttering and repetition are somewhat ambiguous in this respect mainly because stuttering can be caused by pathological characteristics of an individual and repetition can also be viewed as monitoring the material already enunciated. A false start obviously is a monitoring type of deviation.

Planning or monitoring can be good or bad. The deviations can expose deficiencies in linguistic competence: they then signal errors of competence. But they can also reveal deficiencies in translational competence, such as difficulties in the selection of an equivalent construction or lexical item to match the L1 material or to fit the preceding L2 material or difficulties in choosing the optimal ear-voice span in simultaneous interpreting or in storing L1 material in consecutive interpretation.

B. It is sometimes assumed that, as opposed to a written text, speech has a looser structure (cf. Leech and Svartvik 1975:159). In translation this can be manifested by greater use of coordination, fewer embeddings, omission of subordinate clauses, conjuncts, and collapsing of sentences with accompanying simplifications in T2 (= text in L2).

Two examples:

	T1		T2
(4)	complex sentence	→	compound sentence
	Since it is possible by this means to make use of both sides of a page, books for the blind are less bulky.		Książkę można w ten sposób drukować dwustronnie i całość jest objętościowo mniejsza. [The book can this way be printed on both sides and the whole is smaller in volume.]
(5)	simple + complex sentence	→	simple sentence
	Braille's idea was to use raised dots instead of raised letters. He evolved a system which made use of six dots in all.		System Braille'a polegał na zastosowaniu układów sześciu wypukłych punktów. [Braille's system consisted in the in the use of six raised dots.]

In our sample translation (Kopczyński 1980:52-60) we found that by far the most frequent interpreting strategy consisted of what we call decomposition operations, i.e., syntactic simplifications and omissions. A very striking pattern of omissions consisted of leaving out modifying elements of different kinds, from adjectives and adverbials to relative phrases and clauses and adverbial clauses. The strategy is then apparently to focus the attention in the first instance on the constitutive part of T1: the main clause, the main verb, the head noun. The modifying elements, including subordinate clauses, are evidently viewed as redundant and frequently dismissied (*ibid.*, 85-93).

C. In terms of levels of usage, written discourse is often associated with formality and politeness and spoken discourse with informality and familiarity (Leech and Svartvik 1975:27). In interpretation, the effects of this impromptu characteristic can be expressed in stylistic shifts in formality. Below are some examples in which interpreters have used more colloquial phrases than the occasion calls for.

	T1	T2
(6)	Na zakończenie wznoszę toast na cześć Prezydenta Nixona. . . [In conclusion, I propose a toast to President Nixon. . .]	a) I drink to President Nixon b) I'd like to toast. . . c) At the end, a toast to. . .
(7)	I wish to thank you. . .	a) Dziękuję Panu [Thank you] b) Dziękuję bardzo [Thank you very much]

The above are fragments of text type (c), a toast prepared for delivery at a summit meeting. It contains a number of formal ritualized expressions that should be rendered very carefully at such a high level of formality. This tendency to lapse into a less formal stylistic level is frequent practice among interpreters.

To sum up. Since conference interpreting is an oral activity, it has features of impromptu speech, and it can affect performance, especially when T1 is not impromptu speech itself. Such a text can be interfered with by impromptu-speech features in varying degrees, thus

- it can retain all of its appropriate features in terms of structure and style except it is delivered orally (e.g. text type (d), a convention, delivered fluently with all the appropriate terminology, style, and structure);
- it can retain all of its appropriate features but is delivered with deviations typical of impromptu speech (examples in (3));
- it can contain traces of impromptu speech structures (examples (4) and (5));
- it can contain traces of impromptu speech style (examples (6) and (7)).

* * *

It is a well-known fact that texts often defy neat classification. This general truth obviously applied to the text types mentioned in (1).

For instance, texts of the (c) type (written monologue intended for oral delivery) can have a highly mixed character. On the one hand one such text, a toast, even if it is prepared in advance for a formal occasion such as a summit meeting, basically has an interpersonal function characteristic for speaking where referential content is of little importance. Also, since it is delivered orally, it can rely on paralinguistic and non-linguistic cues for cohesion and can contain a number of exophoric devices. On the other hand, it can have features of written discourse such as verbalization of cohesive devices, and formulaic expressions not common in speaking.

Let us look at the toast as a type of text, its macro-structure and degree of ritualization:[4]

- it is a monologue but of a peculiar kind: although it is a long stretch of discourse delivered by a single speaker, it in fact functions within two-way communication because there is usually a follow-up toast. Therefore we can speak of an initiator toast and a response toast and each of them should be different in structure;
- its main function is interpersonal;
- the parties to the transaction are visible;
- in terms of tenor it can range from formal to intimate styles;
- formal toasts are usually –impromptu (prepared, planned) and intimate toasts are +impromptu.

I shall assume that the macrostructure of the toast contains the following parts:

a) address (A)
b) embellishment (E)
c) identification (I)
d) welcome/appreciation (W)/(AP)
e) greetings (G)
f) exhortation (EX)
g) incantation (IN)

Examples of realizations of these elements of the structure are to be found in the Appendix.

The elements of the context for the two toasts are:

field. . . . . . . reception at a summit meeting
tenor . . . . . . head of state: head of state: state
delegation; maximum social distance;
mode . . . . . . spoken medium: aural channel: visual contact.

The structures of the two toasts are

IT: A - I/W - I/G - EX - IN
RT: A - I/AP - EX - IN

We can see that there are striking similarities between the two speeches but the first one is an initiator toast (IT) and the other one is a response toast (RT). The difference is in the WELCOME vs. APPRECIATION elements. The IT also contains the GREETINGS element.

There is also a striking similarity in the ordering of the elements. I would like to claim that within the stated context the ordering is rather rigid.

The element that is missing in both toasts is what we have called EMBELLISHMENT. It is a joke, a quotation, a metaphor, etc., usually placed near the beginning of the toast. In the English-speaking cultures this element is not limited to toasts but extends to other types of speeches and lectures ('you are supposed to tell a joke at the beginning'). This brings out the fact that some of the elements are obligatory, others optional. EMBELLISHMENT is obviously an optional element.

It may be that in the case of the toast the degree of optionality of elements, like the ordering, depends on the level of formality. However, more extensive research would be needed to ascertain this. Evidently the context of our example toasts was considered by the speakers as too formal for joking. Conversely, the less formal the context, the more optionality: at a friendly party you may very well omit all the elements except the incantation and simply say 'Cheers!'.

Thus, differing macrostructures for the toast according to the tenor variable could be:

a) maximum social distance: A - (E) - I - W/AP - (G) - EX - IN

b) social distance: A - E - (I) - AP - (EX) - IN

c) minimum social distance: (A) - (E) - (I) - (AP) - (EX) - IN

Optional elements in (b) are arbitrary for lack of more extensive data; (c) is the case of 'Cheers!'.

Finally, we can see that in the appended toasts there is no significant informative content.[5]

Some texts are more ritualistic and therefore have a more predictable structure than others.[6] One such text is the toast. Others include greetings and the inaugural address among the ± impromptu texts, and the final communique, statutes, and agreements among the -impromptu texts. I believe that predictability in this sense plays an enormous role in the assessment of relative ease or difficulty in interpreting. And it is an important element in any discussion of impromptu speech.

NOTES

[1] Our 'prepared' vs. 'unprepared' is similar to N.E. Enkvist's 'scripted' vs. 'unscripted' in this volume. 'Scripted' presupposes 'planned' although 'unscripted' does not necessarily presuppose 'unplanned'. In any case, completely unplanned speech seems to be a purely theoretical construct; there is always some degree of planning involved in speaking – see e.g. Goldman-Eisler (1968).

[2] It seems that 'impromptu' is typically associated with the spoken medium although written impromptu texts are also cited (e.g. letters). It may be that letters are cited as impromptu texts because they are stylistically closer to speech than other written texts and because they are usually produced on the spot without planning or preparation. In the latter sense we can even think of poetry as being impromptu if the poet writes under sudden inspiration. However, any text or part of text can be written under instantaneous inspiration, including scientific texts. Are such texts to be counted as impromptu or not? The answer depends on how we define planning, scripting or preparation. In spite of other insoluble complexities, the dichotomy between spoken and written texts has the advantage of at least one fairly clear criterion, trivial as it is: spoken is spoken and written is written. Luckily, there is a partial overlap between the two dichotomies and I believe that within our communicative intuition 'spoken impromptu' is felt as unmarked and 'written impromptu' as marked.

[3] All of the translations cited here were done by students of interpretation at the Institute of Applied Linguistics, University of Warsaw.

[4] The general format of the analysis is that developed by M.A.K. Halliday and Ruqaiya Hasan (cf. Hasan 1977).

[5] But sometimes the order or omission of elements or sub-elements can give cues as to the assessment of and attitude to the negotiations, talks, or relations between the countries involved. In such instances the study of textual macrostructures is useful, because deviations from the archetypal macrostructure can become significant. Also, some elements can become highly codified and assume idiomatic meanings, e.g. the assessment of talks in a final communique ('The talks were held in a businesslike atmosphere', 'The talks were held in a cordial atmosphere.' etc.).

[6] See Enkvist's 'macrostructural boundness' in this volume.

APPENDIX

Initiator Toast

A	Mr. President and Mrs. Nixon, Ladies and Gentlemen, comrades and friends,
I/W	First of all I have the pleasure on behalf of Chairman Mao-Tse-Tung and the Chinese Government to extend our welcome to Mr. President and Mrs. Nixon and to our other American guests.
I/G	I also wish to take this opportunity to extend on behalf of the Chinese people cordial greetings to the American people on the other side of the Great Ocean.

EX President Nixon's visit to our country at the invitation of the Chinese Government provides the leaders of the two countries with an opportunity of meeting in person to seek the normalization of relations between the two countries and also to exchange views on questions of concern to the two sides. This is a positive in conformity with the desire of the Chinese and American peoples and an event unprecedented in the history of the relations between China and the United States. The American people are a great people. The Chinese people are a great people. The peoples of our two countries have always been friendly to each other. But owing to the reasons known to all, contacts between the two peoples were suspended for over twenty years. Now through the common efforts of China and the United States, the gate to friendly contacts has finally been opened. At the present time it has become a strong desire of the Chinese and American peoples to promote the normalization of relations between the two countries and work for the relaxation of tension . . .

IN In conclusion, I propose a toast to the health of Mr. President and Mrs. Nixon, to the health of our other American guests, to the health of our friends and comrades present, and to the friendship between the Chinese and American peoples!

Response Toast

A Mr. Prime Minister and all of you distinguished guests this evening.

I/AP On behalf of all your American guests I wish to thank you for the incomparable hospitality for which the Chinese people are justly famous throughout the world. I particularly want to pay tribute, not only to those who prepared the magnificent dinner, but also those who provided the splendid music. Never have I heard American music played better in a foreign land.

Mr. Prime Minister, I wish to thank you for your very gracious and eloquent remarks. At this moment, through

EX the wonder of telecommunications, more people are seeing and hearing what we say than on any such occasion in the whole history of the world. Yet what we say here will not be remembered. What we do here can change the world. In the spirit of frankness which I hope will characterize our talks this week, let us recognize at the outset these points: we have at times in the past been enemies. We have great differences today. As we discuss our differences, neither of us will compromise our principles. But while we cannot close the gulf between us we can try to bridge it so that we may be able to talk across it.

IN In that spirit, I ask all of you present to join me in raising your glasses to Chairman Mao, to Prime Minister Chou, and to the friendship of Chinese and American people, which can lead to friendship and peace for all people in the world.

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When is it my turn to speak?[1]

Abstract. A number of descriptive variables for impromptu speech are proposed. This study is concentrated on those signals that are correlated with turn-taking in spontaneous conversation. Turn-taking, it was found, takes place at a point in the discourse which represents a joint combination of a prosodically, syntactically, and semantically completed sequence, together called a grammatical boundary. Also, loudness reduction and/or pause were found to be present in about 2 cases out of 3.

Impromptu speech

Granted that no simple and clear-cut definition of ’impromptu speech’ can be arrived at, another approach to the problem would be to describe it with the help of a number of variables which together throw some light on its characteristic nature.

One type of impromptu speech, presumably also the most common use of language, is informal everyday conversation between friends and between husband and wife and other members of the family. Below, conversation has been contrasted with chairman-led debate; ’+’ means ’having more of’ and ’-’ means ’having less of’ the listed variables. It is an attempt to point at certain striking tendencies rather than describing the two kinds of speech events in black and while only. The list can, of course, be supplemented:

	Conversation	*Debate*
• Private rather than public	+	-
• Casual and spontaneous (Not scripted or premeditated; planning and production are more or less simultaneous)	+	-

	Conversation	*Debate*
• Institutionalized (Formal setting; turn order, aim, length, and topic are specified in advance)	-	+
• Focus on the interaction (Facts are not always central)	+	-
• Freedom to introduce new topics	+	-
• Frequent use of 'tag questions' and 'intimacy signals' (*isn't it, you know*)	+	-
• Frequent use of 'listener reactions' (*m, yes, oh, that's right*)	+	-

To sum up, conversation may be characterized as an informal speech event which is largely guided by the spontaneous wishes and interests of the participants and may occur for no other reason than to carry out social interaction. A debate, on the other hand, is a formal speech event which is highly task-oriented and is characterized by organisational efficiency.

Turn-taking

When two people want to communicate, thay are faced with what can be called a 'coordination problem'. In order to avoid constant clashes, they will have to synchronize their utterances. The adoption of such a convention will then work normatively, ie. they will try to adhere to it and will expect their partner to do the same. When such a convention has been widely accepted in a speech community, it can be referred to as 'standardized usage' (Cushman & Whiting 1972).

Linguistic interaction can be seen as recurrent switching from speaker to listener, from action to reaction, from foreground to background activity. This on-off characteristic, termed 'turn-taking', is not only one of the most obvious features of conversation but also a defining criterion of it; without turn-taking no conversation.

There is general agreement that two different types of utterances must be kept apart in a discussion of turn-taking. There is on the one hand the speaking-turn, an utterance that conveys new information and that expands the topic (Henne 1978). On the other hand, there are the back-channel items (Yngve 1970), which are the listener's brief reactions to the speaker's message supplying him with feedback and signalling attention, agreement, and various emotional reactions. The back-channel items are uttered by the listener while the speaker is having his turn and a few examples are *m, yes, OK, right, exactly, oh, good, I see, that's right*, etc. Without these listener reactions the speaker will sooner or later start wondering whether he is being listened to or not, whether the communicative contact has been discontinued. Such items are never picked up and commented on by the speaker but they greatly help to sustain the interaction. They can therefore be said to have a relatively low value on the 'content level' but a relatively high value on the 'relationship level' of communication, to use Watzlawick, Beavin & Jackson's (1967, 51) terms. They are often also uttered with weaker or much weaker loudness than the person's normal (Oreström 1977). Emission of a back-channel item does not represent an act of turn-taking but rather the opposite. It confirms that the person is still assuming the listener role without intending to take the floor.

How and where does then the exchange of speaking-turns take place and how does the listener know when it is his or her turn to speak? As speakers do not constantly collide but the listener manages to come in and take over with precision even in quick conversations (Jefferson 1973), he must be able to decide when the speaker has reached a point of completion. In other words, the listener is able to identify completed and non-completed stretches in the speaker's ongoing talk and quickly spot those points in the output which represent such completed sequences. It is here that turn-taking takes place. The fact that the listener is able to do this can be ascribed chiefly to two circumstances:

- the listener analyses the ongoing speech and makes inferences from the constraints that the gradual narrowing down of choices yields, information that he uses for setting up a 'running hypothesis' about the speaker's intended message

- the speaker puts out signals, verbal or non-verbal ones, intentionally or unintentionally, which further punctuate his completions and guide the listener in his search for points where it is relevant to take over.

It is the combination of these two circumstances, the listener's interpretation enabling anticipation of the intended message, and the speaker's signals, that makes it possible to enter with precision and recurrently execute well-timed turn-takings. The notion of a 'running hypothesis' was suggested by Kendon (1970), and the speaker signals have been studied by, in particular, Duncan (1972 and other studies).

Aim, material, and method

The aim of the present paper is to study the signals operating in the turn-taking process and facilitating smooth exchanges of turns.

The material used here consists of four dyadic (two-person) conversations from the London-Lund Corpus of Spoken English. During the last two decades, this corpus has been recorded, transcribed, and supplied with a rich notation of prosodic and paralinguistic features at University College London. The basic prosodic entity is the 'tone unit', which is a stretch with a nuclear tone. (For a description of the corpus, see Svartvik & Quirk 1980, and for the analytic system, see Crystal 1969.) The corpus samples were tape-recorded and therefore contain no data on body language, a factor that has been found to show correlation with turn-taking. The conversations in my material can be described as informal talks between colleagues, friends, and between husband and wife, all of them British academics.

The present study is focussed on those points in the discourse where the listener took over the turn concentrating on the 'linguistic situation' prevailing at that very moment. What factors exist at and immediately before the transition from listener to speaker?

However, the prosodic and paralinguistic notations in the corpus are so many that all types could not possibly be included in this study. Here attention will be paid only to those which were found to occur with reasonable frequency with regard to turn-taking.

Despite this selection, there remained more than twenty different factors representing syntax, prosody, and semantics. These were fed into the computer for calculations.

Results and discussion

In the four conversations, there were in all 717 instances of turn-taking.[2] The vast majority of these (87%) took place without any simultaneous talk. These were made subject to further study. But before that, it was necessary to exclude the very short speaking-turns as they did not allow studies on speed and loudness variation properly. The turns that merely consisted of one single tone unit (8% of all turns in the present material) were therefore filtered off. Hence, the results below concern those turn-takings with no simultaneous talk involved and where the speaking-turn consists of two or more tone units.

Of all the coded factors, there were five that showed correlation with turn-taking. They were:

Prosodically completed sequence	96%
Syntactically completed sequence	95%
Semantically completed sequence	95%
Loudness reduction	45%
Pause	41%

Table 1. The linguistic factors correlating with turn-taking.

By 'prosodically complete' is here meant a terminated tone unit. By 'syntactically complete' is meant a terminated sequence that is syntactically independent of a following sequence. It is often manifested as the end of a sentence. By 'semantically complete' is meant a terminated sequence that can be interpreted as fully rational. The combination of these three, together called a 'grammatical boundary', constitutes a major juncture in the speech output and serves as the central cue for the listener when he wants to take over. The following example shows one instance of turn-taking in which the grammatical boundary is present:[3]

B *I I'm not very good on · on mechanical lànguage #*
but one of the cỳlinders # might be just · missing a bit #
from the sòund of it #
A *well this is what Ì felt too # so one of the cylinders*
mìssing (continues) (S.4.1, tone units 397-402)

Further, almost every second instance of turn-taking was preceded by a step-down in loudness as regards the last few words of the speaker's turn. In the majority of all speaker-shifts there was no pause involved. Loudness reduction, starting before the grammatical boundary has turned up, may operate as a 'pre-signal' conveying the information that the speaking-turn will soon possibly be terminated. A pause following a grammatical boundary works additively and confirms that this boundary has actually turned up. For a listener interested in talking the floor, the grammatical boundary seems to serve as the primary cue whereas loudness reduction and pause seem to serve as secondary cues.

Fig. 1 presents the combination of the five factors given above:

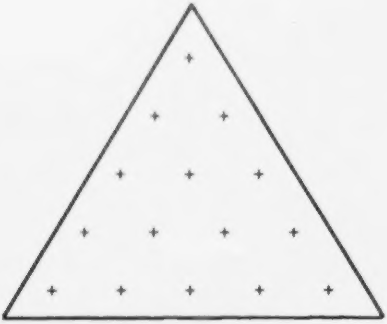

Fig. 1. The combinational distribution of the factors in Table 1.

The combination of three of the five factors existed in every third case of turn-taking. The three-factor combination was almost exclusively the grammatical boundary. The combination of four of the five factors was found in almost every second instance of transition.

From a somewhat different angle, a speaking-turn could be regarded as a multi-dimensional message whose various dimensions are like 'pulses' or 'waves' with peaks and troughs (Fig. 2). The converging and diverging waves could then be seen as stretches along these dimensions, which, when having reached a trough position, have also reached a completion on that dimension (eg. a trough on the prosodic dimension corresponds to a completed tone unit). After that, the wave can only continue by taking a new direction, which means that a new sequence is then begun. When the waves cooccur in a trough, this could be called a 'hit' (circled in the figure) and this hit represents a point of possible completion of the turn.

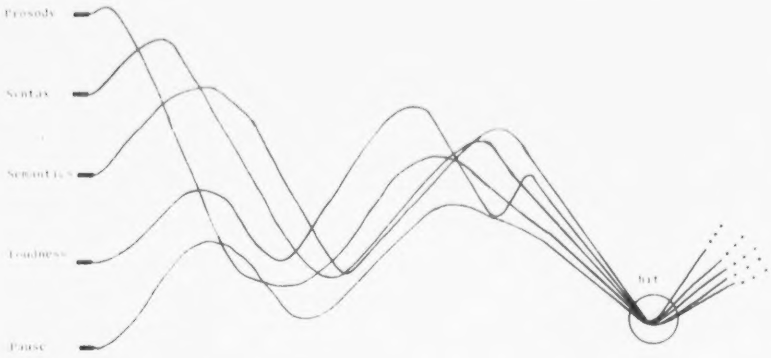

Fig. 2. The speaking-turn seen as a message with multi-dimensional waves.

When the speaker displays those signals, the listener can never be fully certain that he actually intends to finish. He may want to continue. But what the listener will know is that the speaker has reached a point of possible completion and it is towards these possible completions that the listener orients himself when he wants to take over. There is also, of course, an option for the listener upon the display of these signals. He can choose to take over or to remain listener (with the obvious exception when a question is put to him). To use a term in Enkvist's article (this volume), a hit makes up a 'decision point' for the listener.

A closer look was also taken at speed and loudness variation in the turn on the basis of the notations in the material. The beginning (= first tone unit) and end (= last tone unit) of every turn was studied with respect to such variations:

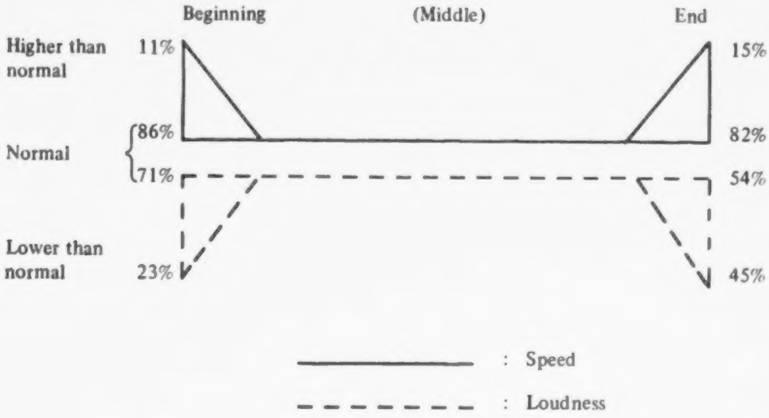

Fig. 3. Speed and loudness variation within the speaking-turns.

It can be seen that a person generally started with his normal speed and loudness and finished with his normal speed. But as we saw earlier, about every second time he reduced his loudness towards the end. The observation that he speeded up towards the end in 15% of all cases deserves a comment. I can see two possible explanations to this. It could either mean that the speaker after having delivered the essential part of his message ('body'), has only got additional and less important information ('tail') to present and therefore does this in a quicker manner thereby indicating that he is about to yield the turn. The other possibility would be that the speaker, when realizing that the partner has understood or anticipated the intended message ("I know that you know"), speeds up in order to finish before the other enters.

Finally, Crystal (1969, 151) mentions a phenomenon that he calls 'descending' and which refers to a gradual descent stretching over a series of tone units. "Usually the . . . descent takes place in a series of stages, each stage being coextensive with a tone unit within the utterance." This tendency of pitch to drift down-wards over one or more intonation groups where each intonational peak is lower than the preceding one could be illustrated as in Fig. 4:

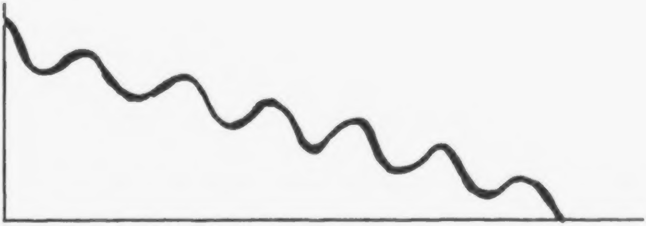

Fig. 4. The downdrift effect.

The downdrift effect has been observed, not only in English, but also in newscasts in Finland-Swedish (Enkvist & Nordström 1978). However, the downdrift effect was found to be a typical of spontaneous conversation.

Conclusion

Suggestions have been given for some relevant variables as regards a description of impromptu speech. In the material studied, five factors were found to show correlation with turn-taking: completion of a prosodic, syntactic, and semantic sequence whose joint completion constitutes a major juncture in the speech output called a grammatical boundary. The remaining two factors are loudness reduction and pause. About 87% of all turn-takings took place without any simultaneous talk and of these, 95% occurred at a grammatical boundary. In two cases out of three the grammatical boundary was also combined with a step-down in loudness immediately before and/or a pause. Step-up in loudness hardly existed at all at turn ends whereas a step-up in speed occurred as 15% in such positions. It is proposed that increased speed at the end of the speaking-turn is either a way of tailing off or a way of 'protecting' the turn.

NOTES

[1] This study consists of selected parts from my forthcoming doctoral thesis titled 'Turn-Taking and Interruption in Face-to-Face Conversation'. It is based on the London-Lund Corpus lodged in the files of the Survey of Spoken English, University of Lund, a project supported by The Bank of Sweden Tercentenary Foundation and Knut and Alice Wallenberg's Foundation.

[2] The conversations are S.1.1, S.1.4, S.1.6, and S.4.1. The conversations are approximately 20-30 minutes long.

[3] '#' = tone unit boundary, ' · ' = brief pause.

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Impromptuness and Intonation

Abstract. The concept of *prominence* (as characterized in Brazil, Coulthard and Johns, 1980) is discussed in relation to the real-time aspect of spoken communication. Its significance is explicated in terms of the way the speaker *projects* a here-and-now state of understanding in which particular words either do or do not constitute a *sense selection*. Other intonational features are touched upon; and an examination of the unit that provides their domain is proposed, as one way of relating segmentation problems to the linear presentation of speech.

I want to offer some thoughts on impromptuness as a feature of verbal communication from the point of view of someone whose particular interest is in the intonation of English. I put it this way, referring to 'impromptuness' as a general condition of such communication, rather than speaking of an identifiable variety of 'impromptu language', advisedly. One of the things that an engagement with the communicative value of intonation compels one to take seriously is the fact that utterances are typically produced in real time and decoded in real time. It quickly proves impossible for anyone investigating this area to ignore the way the substantive events that constitute speech are organized in linear sequence. In this respect intonation encourages a quite different theoretical stance from that adopted by those who investigate the apparently-hierarchical structuring of syntax. Although linguistic orthodoxy has given little recognition to the fact, there are many questions of both a theoretical and a practical nature that can scarcely be formulated satisfactorily without reference to some kind of step-by-step model. There is no need to labour the point that they include questions with which many of the other contributors to this symposium are centrally concerned. For them, as for me, there seems to be a need for a descriptive enterprise which does justice to the wholly pragmatic nature of much linguistic behaviour: that is to say an enterprise geared to capturing the way speakers make moment-by-moment adjustments to a constantly changing state of conversational play. It is this fact of accommodation to the here-and-now that I shall take as my working definition of impromptuness.

Obviously, a paper about intonation must focus upon the spoken language. A study of what happens when people read aloud does, in fact, suggest that the present approach has relevance to some aspects of the organization of the written word, but this cannot be enlarged upon here. Neither can the likelihood that observable consequences of impromptuness will usually be less in evidence in writing than in speech. If it should prove heuristically useful to postulate a distinction between language which *is* impromptu and language which *is not*, the distinction will presumably rest upon observations of what those consequences are. It may then turn out that a *reader's* intonation owes less to special nonce decisions that reflect a semi-private state of speaker-hearer understanding and more to a consideration of the pre-arranged, and so publicly-available text – a circumstance which would certainly be in line with how the spoken/written and impromptu/prepared dimensions of variety might be expected to be related. My position, for the purposes of this paper, is that the consequences of impromptuness must first be examined.

I do not have the space to expound at length the descriptive framework within which my approach to intonation has been developed. I can only say that my claim that the fragment of analysis given here is valid is part of a larger claim that the framework provides a coherent and tenable view of the meaning system realised by intonation. The need for a concise treatment also dictates that I use manufactured examples to make my points, instead of referring directly to the very large amount of naturally occurring data from which my descriptive categories are derived. I shall confine my attention mainly to a single meaningful opposition in the intonation system. This will be sufficient basis for discussing a number of matters that I take to be interesting. It will allow me, moreover, to avoid assuming much more phonetic expertise than the ordinary dictionary-user is commonly credited with.

The dictionary entry for a word like *controversial* assigns 'secondary stress' and 'primary stress' to certain syllables as follows:

^{2}contro^{1}versial

In other words there is 'primary stress' only:

con^{1}tain ; ^{1}conduit

I shall not dwell upon the phonetic correlates of either of these 'levels of stress' as they are manifested in the citation forms of the words. Instead, I shall take it that people can both produce and recognize them, and go on to propose that *both* be referred to as *prominent syllables*, a proposal that is encapsulated in the following conventions:

CONtroVERsial ; conTAIN ; CONduit.

The justification for lumping the two together as a single category and postponing consideration of how they differ is the fact that the syllables thus characterized as *prominent* are meaningfully opposed to all others that are not, an assertion that will be expanded presently. Meanwhile, it is necessary to recognize that prominence is not a property of the word, but an attribute of some functional stretch of speech. This can be seen in the differential distribution of so-called primary and secondary stress when the words occur in context. We might, for instance, hear,

CONtroVERsial
a CONtroversial deCISion
the deCISion was controVERsial
VERy controversial inDEED

Controversial has two prominent syllables only when it is spoken out of context. Under these circumstances, both prominences that seem to be usual in a particular kind of pattern are compressed into a single word. In other circumstances it may have only one or none. This is not to suggest, of course, that there are any circumstances in which the syllables of *controversial* are not differentiated in a way which might be heard as differing 'degree of stress'. The objection to speaking of 'tertiary' – and perhaps other – levels of stress in this connection is that the resultant scale conflates two phenomena that ought to be kept separate. Whatever distinguishes *con-* and *-ver-* when neither is prominent is a residual feature of the word. Prominence is a feature whose distribution results from a speaker-decision quite separate from those he takes in assembling the lexis of his utterance. As a separate decision, it is separately meaningful.

The practice of speaking of stress as variation on a single dimension is a legacy of Bloomfieldian structuralism and its insistence on a 'meaning-free', phonetic, analysis. One of the starting assumptions of the present approach is that, until we have at least a working hypothesis about what is in meaningful opposition with what, we cannot know which of the many variables any utterance exemplifies to pay attention to. A consequence of adopting this position is that the received distinction between 'stress' and 'intonation' gets re-examined, the phenomena I have identified as prominence being shown to realize part of what I shall refer to as the intonational meaning-system.

Looking into the meaningful consequences of assigning or not assigning prominence is, I believe, an exercise highly relevant to understanding more about the now-coding aspect of speech. Consider, first,

the TENTH of MAY , or MAY the TENTH

as specimens of the two-prominence pattern that CONtroVERsial typifies. Either is a possible response to some such question as "When's your birthday?" We can provisionally associate the fact that both *the* and *of* are almost certain to be non-prominent in both responses with the fact that there is no possibility of a different word in the slot occupied by either. Compare this state of affairs with that obtaining at *tenth* and *May*, where the word represents a *selection* from a set of up to thirty-one possibilities and twelve possibilities respectively. But note that the limitation on the exact number of possibilities here derives not from the nature of the language system (as it does in the case of *the* and *of*) but from the extra-linguistic fact of how certain human communities have decided to organize their calendar. A distinction can be made between the *existential paradigm* – that set of items that are actually available at any place when all the here-and-now circumstances – including non-linguistic circumstances – have been taken into account, and the *general paradigm*, the (usually much larger) set that the language system makes available. Allocation of prominence can then be shown to carry the meaning that the item in question is selective in the existential paradigm.

Consider now

The tenth of what?	the tenth of MAY
Which day in May?	the TENTH of May

The responses are now of the one-prominence pattern typified by conTAIN and CONduit. The fact that in the second of the two the 'nuclear' or 'primary' stress is 'moved' is of no interest for the present, since selectivity is associated with all prominent syllables. What these examples demonstrate is that if the preceding discourse (part of the total environment of the utterance) removes the possibility of selection in the relevant existential paradigm, then either *tenth* or *May* will probably be produced without prominence if they are included in the response at all. (Perhaps the most likely responses would really be "May" and "The tenth" respectively, with non-selective words omitted.) For another manifestation of zero choice in the existential paradigm, consider

> TOM dick and HARry
> KNIFE fork and SPOON,

where it can commonly be assumed that anyone hearing the first and last member of the trio will not entertain the possibility of there being anything but *Dick* or *fork* in the intermediate slot.

The picture suggested by this handful of examples over-simplifies reality in at least three important respects. In the first place, I have made my points by supposing that the utterance in question occurs *after* some circumstances or event that determines what is selective and what is not: choice is eliminated by the terms of a question, or by a culture-wide familiarity with the expression "Tom, Dick and Harry". Where this situation actually exists, it is possible to say that the non-selective item is "predictable". But utterances do not, characteristically, simply reflect a pre-existent situation. They rather *project* a situation on the assumption that it will be acceptable to the hearer. In her critique of work on the so-called Nuclear Stress Rule, Schmerling cites the pair of sentences:

(i) The text if very good, but page 27 contains a lousy footnote.
(ii) The only mention he makes of my work is a lousy footnote!

The treatment she expects for the final noun phrase, in her notation and in mine, is

(i) a^2 lousy ^{1}footnote ; a LOUSy FOOTnote
(ii) a ^{3}lousy ^{1}footnote ; a lousy FOOTnote,

her general point being that these variant forms are not predicted by the NSR (Schmerling 1976). Seen from the point of view of existential selection, *lousy* in (i) seems likely to attract prominence, since a text which was no mote than 'very good' could conceivably contain a footnote which was excellent; but in the world that (ii) projects, there is an understanding that if there's only a footnote referring to the speaker, then it cannot be other than lousy. It seems to be a characteristic of genuine expletives that they are presented as non-selective: compare

DON'T be a bloody FOOL
a BLOODy HANDkerchief

When intuition seems to attach a particular phonological shape to a particular lexico-grammatical item, we can usually attribute it to the discourse conditions the item most characteristically projects. Compare

(i) THREE tall TREES, and (ii) some TALL TREES.

If the first occurred in real discourse it would probably project an expectation that once the three trees have been identified (as some kind of landmark, perhaps) their tallness will be self-evident: there is no group of three trees that are *not* tall. The second would be more likely to occur in a situation in which *tall* was an essential distinguishing feature. The possibility of there being trees that are not tall is acknowledged, but such trees are expressly excluded from the scope of the expression.

To say that *tall* is non-selective in (i) is clearly not to claim that it can be 'predicted' as a constituent of the utterance by any conversationally-involved hearer. The notion of predictability is even less useful for explicating examples like

the PRESident's been shot

Certainly the hearer is not expected to be able to predict *shot* if such an assertion occurs – as it easily might occur – at the very beginning of a conversation. It is rather that, by projecting a conversational state in which a hearer's interest in who's been shot now can be permanently relied upon, the speaker achieves the impact of saying, in effect, ". . . this time it's the President!" (Compare the rather similar effect of the conversational opener: "Who do you think has been sacked/promoted/convicted of shoplifting/etc.?") The impact is lost if both *president* and *shot* are presented as selective: the PRESident's been SHOT.

A second refinement of the notion of selectivity can be appreciated by glancing again at the second of Schmerling's example. It is very likely that other epithets than *lousy* would have much the same value in the context she proposes. If we persist in thinking of 'word selection', we may very well have to admit to the existence of some such existential paradigm as ". . . a lousy/miserable/wretched/ etc. footnote." In saying that absence of prominence signals no selectivity, we are not here saying that there is no other word available, but that a situation is projected in which there is *no other sense* available, any other words that might fill the shot being existential synonyms of *lousy*. Notice, moreover, that the self-same lousy footnote might be short or lengthy, critical or approving. Non-selective *lousy* does not necessarily exclude any of these. To say that its non-prominent treatment projects an understanding that it *cannot be other than lousy* is to recognise that selection is confined to a single *sense dimension*. It happens that, in the example used above, both *tenth* and *May* are words which uniquely realise particular senses: *ninth* can never be used as an existential synonym for *tenth* nor *June* for *May*. Neither can any word other than a numeral fill the *tenth* slor or any but the name of a month fill the *May* slot. (In saying all this, we are ignoring the marginal possibility that one might give one's birthday as "The Ides of March", or even "April Fool's day", but these involve no new principles.) In many cases, however, words are not reckoned to be in a permanent and publicly-recognised relationship with a sense. They contract here-and-now relationships with each other in a way that could never be predicted from an examination of anything we may postulate as the abstract lexical organisation of the language. If the speaker assumes an ongoing understanding that short footnotes are lousy, then *short* and *lousy* are existential synonyms. If, on the other hand, the assumption is that lengthy footnotes usually treat of matters that ought to be incorporated in the text, so that only short ones are excusable, then *short* and *lousy* might be incompatible members of the same existential paradigm. To understand the factors which determine how a speaker distributes prominent syllables, it is necessary to think of him as making moment-by-moment assessments of how sense dimensions are presently constituted; or, more accurately, moment-by-moment judgments as to how he can safely *represent* them as being constituted.

Replacing the notion of word selection with that of sense selection makes it possible to deal with a third matter that the provisional statement of the prominence/selection equation overlooked. This is the fact that prominence is an attribute of the syllable, not the word. Since *tenth* and *May* are monosyllables, it was easy to gloss over any consequences there may be of confusing 'prominent word' with 'prominent syllable'. In practice, this inconsistent use of terminology creates fewer problems than might be supposed because of the empirical fact that, when English words are used in discourse, a single prominent syllable is usually enough to specify an existential sense uniquely. This need be demonstrated only sketchily, since it bears only indirectly upon present concerns. In

the FOURteenth of FEBruary

it is easy to see that *-teenth, -ru-, -ar-* and *-y* are non-selective in all contexts, in the same way as *the* and *of* are. Even when the language system allows selection at a syllable that is normally non-prominent (as for instance in the pair BIRTHday and BIRTHright) it is rare for the choice actually to exist in any real set of discourse conditions. Notice that different considerations apply to

the TWENty-first of MAY,

which projects as assumption that *first* is non-selective. In many contexts it is, and when it is not, the alternative form

MAY the twenty-FIRST

is available to project a different assumption. But when someone is asked by a stranger to state his birthday, it would be usual for both *twenty* and *first* to be selective. (There is a chance of its being the twenty-second/third/etc. or the twenty-first). We should then expect both to be prominent:

the TWENTy-FIRST (of MAY), or (MAY) the TWENty-FIRST

It would be rash to suggest that orthographic convention consistently treats as hyphenated forms those items that need often to realise two sense selections and represents as real compounds those which commonly realise only one (e.g. BIRTHday). It would be surprising, though, if there were not some correlation between orthography and this central fact of phonology.

Of more immediate interest is the problem presented by the need to suggest a suitable phonological shape for

the TWENty-FIRST (of MAY), and (MAY) the TWENty-FIRST.

The citation forms referred to at the beginning of this paper provided two patterns for a functional unit, one having a single prominent syllable and one having two. It is not widely recognised that nearly all naturally-occurring discourse can be represented as a concatenation of units having one or other of these shapes. To enlarge upon this, we must now acknowledge the distinctiveness of the 'nuclear' or 'primary-stressed' syllable that has so far been discussed only in terms of its functional similarity to other prominent syllables. If this is marked by underlining, and taken to be the last (and sometimes the only) prominent syllable in its unit, then we can fairly confidently predict

// the TWENty-*FIRST* // of MAY //

rather than

// the TWENty-FIRST of *MAY* //,

or

// *MAY* // the TWENty-*FIRST* //

rather than

// MAY the TWENty-*FIRST* //

So regularly is the upper limit of two prominent syllables observed that it is possible to ascribe special communicative significance to the occasions when it is not. Making projections of what will, and what will not be selective in a given conversational nexus presupposes that there *is* such a nexus for the utterance to mesh with. Language samples, produced simply as samples, clearly cannot make projections of this kind. When a unit has more than the expected two prominent syllables, it can often be heard as an embedded sample or 'quotation' for which the speaker takes no personal responsibility. Compare

// he HOPES to be with us the *NEXT* time we meet //

and

// he HOPES to be WITH us the NEXT time we *MEET* // ,

where the implication that the present speaker is doing no more that repeat the form of words used by the third party would often have overtones of scepticism. It is fairly easy to attach such a local meaning to this item, but rather less so to distinguish the consequences of saying ones birthday is on the //TWENty-FIRST of *MAY* //. Here, quoting the date as a pre-coded chunk is a perfectly effective way of answering the supposed question, and one which would probably have no special conversational repercussions. There are other ways in which *oblique orientation* can be recognised (that is to say orientation towards the language sample rather than towards a hearer). Although the distinction would seem to be a crucial one for an appreciation of how much speech seems to oscillate between 'impromptu' stretches and ready-made, semi-ritualised, stretches, we have to live with the fact that the formal differences are often neutralised (because there are, in fact, no more than two potentially prominent syllables that could provide the formal evidence) and that saying-what-you-mean and quoting-the-form-of-words-that-encapsulates-what-you-mean often amount to much the same thing.

The boundary symbol, //, is not to be taken as meaning that there is necessarily any phonetic manifestation of a boundary. Often there is, but

I hold the view that the study of precisely what happens between units, and in particular the study of pauses, should be quite separate from the business of segmentation. Segmentation involves consideration of paradigmatic choice, for the unit to be described is of interest only in so far as it is the domain for an identifiable set of such choices. Whether there are overt markers of a boundary or not, the unit that the present approach defines can be shown to be the place of operation of three separate speaker opinions, what I have called *tone, key* and *termination*. I believe that together these three account for most, if not all, the either/or variation that others have regarded as comprising 'intonation'. The communicative value of choices in each of the three systems needs separate, and extended, explication. All I can say here is that each has to be conceptualised in terms of the projections the speaker makes about the here-and-now state of speaker/hearer convergence. Study of the whole intonation system, therefore, provides access to the mechanisms whereby the essentially pragmatic business of interactive discourse is managed. Its formalisation is achieved by further elaboration of the conceptual framework I have sketched in to account for the distribution of prominence.

One further area of interest can be opened up by re-examining

// the TWENty -*FIRST* // of *MAY* //

The simple requirement that units should have no more than two prominent syllables would permit

// the *TWEN*ty // FIRST OF *MAY* //.

Most people would probably agree, however, that the second version would be unlikely to occur. We may speculate that the reason for this is that it would be easy to say ones birthday was on the twenty-first and then add – as an afterthought, perhaps – that it was in May; the second (unlikely) version does not represent anything like such a plausible division into 'first approximation' and 'afterthought'. One reason for ending a unit and beginning a new one is the need to select afresh in one of the three systems. If a motive exists for doing this, then boundaries may occur anywhere. If, however, all the choices are identical in the units on either side of the boundary, the decisive factor seems to be what we can loosely speak of the scope of forward planning. Without trying to relate the observation to any psychological or neurolinguistic theory, we can say that there are certain stretches of speech that are far less likely to be 'preassembled' piecemeal than others, a fact which seems to correlate closely with the propensity of boundaries, not otherwise motivated, to occur. Unless there is a different intonation selection after the boundary. we do not usually find divisions in stretches like

> He SEEMED ANgry ; I'm HOPing to SEE her;
> She PUT it on the SHELF

though there is nothing unusual about

> He LEFT // ANgry ; I'm WAITing // to SEE her ;
> She FOUND it // on the SHELF

It is possible, of course, to relate such observations to a grammatical description of the item concerned. The generalisation we need to make to account for this aspect of a speaker's behaviour seems. however, to require reference, not to syntactic constituency as such, but to a fairly simple notion of what does and what does not constitute a credible increment in whatever forward-planning process the speaker is engaging in. Sentence grammars generally make no explicit recognition of this distinction, but there are many reasons why it could be said to be a quite crucial distinction for anyone interested in the real-time generation of speech. One further reason why a syntactic account is likely to lead us astray can be mentioned. If the boundary is made unlikely in *He seemed angry* by the relationship between the verb and its complement, then we shall expect the same to apply to *He really did seem angry*. But

> He REALly did *SEEM* // *AN*gry

is an unexceptional utterance. I can offer nothing more than speculation about the constraint which seems to limit the forward-moving increment to a maximum of two sense selections, but examples like this suggest that it has greater psychological reality that the rules that sentence grammars abstract for us.

The precise relationship between syntactic and intonational phenomena has, I think, been obscured by an accident of history: none of the currently productive linguistic models took intonation into account *ab initio*. The assumption has always been that it could subsequently be accommodated by an extension of the apparatus required for the description of the contextless and unintoned sentence. The most interesting studies in this area have been those that have sought to establish a statistical relationship between intonationally-defined units and syntactically-defined ones (as, for instance Quirk *et al.*, 1964). And what is interesting about them is that in no case have correlations of anything approaching 100% been found. This suggests one of two things: either the bases on which a speaker makes his intonation decisions are different from those on which he makes his syntactic decisions; or the principles encapsulated in grammars that describe context-less sentences are not those that can be said, in any operational sense, to constitute the speaker/hearer's knowledge of the language. Investigation of intonational meaning has to assume the former possibility, the system being represented as a quite separate set of meaningful oppositions, which contribute in some kind of 'parallel channel' arrangement to the communicative value of the utterance. If my earlier characterisation of impromptuness is an acceptable one, then it would seem that the second possibility – that there is an alternative way of handling both intonational and syntactic facts which does not abstract away from context and which does not give up on the crucial matter of linearity – is due for serious consideration.

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Exophora in English conversation

A study of third person pronominal reference*

1 Introduction

"They told me you had been to her,
And mentioned me to him:
She gave me a good character,
But said I could not swim.
He sent them word I had not gone
(We know it to be true):
If she should push the matter on,
What would become of you?
I gave her one, they gave him two,
You gave us three or more;
They all returned from him to you,
Though they were mine before.
If I or she should chance to be
Involved in this affair,
He trusts to you to set them free,
Exactly as we were.
My notion was that you had been
(Before she had this fit)
An obstacle that came between
Him, and ourselves, and it.
Don't let him know she liked them best,
For this must ever be
A secret, kept from all the rest,
Between yourself and me."

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* This study has been carried out at the Survey of Spoken English, University of Lund, with financial support from The Bank of Sweden Tercentenary Foundation.

This poem from Alice in Wonderland is a successful example of deliberately unsuccessful communication. The poem contains a large number of empty pronouns, and it is not possible to identify the referent for a single pronoun. As we are normally not used to empty pronouns, they add to the bizarre atmosphere. We have to agree with Alice when she says "*I* don't believe there's an atom of meaning in it" (Carroll 1960:159).

Real pronominal reference, on the other hand, is either used *endophorically* (textual reference) or *exophorically* (extra-textual reference). In endophoric reference there is a referent in the text which is coreferent with the pronoun. In exophoric reference the referent has to be retrieved from outside the text, or from what is said in the conversation.

Exophoric reference can be of two kinds:[1]

1. the reference is deictic and made to the actual, concrete setting of the situation, e.g. to something that can be seen or heard

2. the reference is made to the abstract context-of-situation, which includes everything that is relevant for the conversation, i.e. reference is made to the shared knowledge or common ground of the participants.

These two types of exophoric reference have in common the fact that they refer to a specific referent, i.e. a person, a thing, etc. There is also a kind of "generalized exophoric reference" (Halliday & Hasan 1976:53). This includes the case of 'they' meaning 'persons unspecified', and 'it' meaning 'things', 'business', 'the situation' (cf. also Bolinger 1977:77 and 1979:290). In this case the pronouns have a generalized reference, but the referent still belongs to the context-of-situation of the actual conversation. I do not agree with Halliday & Hasan that "the referent is treated as being as it were immanent in all contexts of situations" (1976:53).

As the context of a written text differs considerably from that of a spoken text, it can be expected that the frequency and function of exophoric reference in spoken language will differ from that in written language. When I mention spoken language as opposed to written language, I mean impromptu speech or spontaneous conversation as opposed to written language in print. There are, of course, many variants of spoken language as well as of written language, and if we take some of these into account, a scale of the following kind may be set up:

SPOKEN	conversation
↑	discussion
│	debate
│	commentary
│	oration: spontaneous
│	oration: prepared but unwritten
│	oration: written
↓	non-printed, written texts
WRITTEN	printed, written texts

As can be seen, the scale encompasses types from spontaneous speech to written language in print. In between we find various kinds of more or less free or prepared forms of language. The types on the scale sometimes overlap and are also contained in one another. The scale does not pretend to be complete, and variables such as prepared-unprepared, monologue-dialogue, formal-informal, etc. have as a rule not been taken into account.

The reasons for expecting differences in the use of pronouns between the spoken and the written channels are several. One reason is that there is such an abundance of devices and clues to facilitate the interpretation of a pronoun in a conversation that are not present in the context of a written text. Prosody, paralanguage, and body language contribute to the understanding of exophoric reference. The fact that a conversation is a process of interaction also contributes to the understanding. The speakers provide one another with constant feedback and signals so they can coordinate their systems. The relationships between the speakers and the degree of shared knowledge between them can vary. If the speakers are friends and familiar with one another, they have established a common ground and a common discourse model, which they make use of when referring outside what is actually said, and when interpreting exophoric pronouns.

On the other hand, people may make unsuccessful references in conversation, or the tracing of referents may be made difficult through repetitions, interruptions, or incomplete utterances. In written language, references are as a rule successful and the referents easy to locate in the text.

A few more words should perhaps be said about the role of presupposition and shared knowledge in conversation. The participants' experience and knowledge of the world, their social backgrounds, and their relationships constitute a context and a common ground, which provide them with certain possibilities for making assumptions. The larger the area of shared knowledge, the more certain a speaker can be that a listener will understand the meaning of an implicit, exophoric reference.

Even if endophoric reference is more frequent than exophoric, both in written and in spoken language, it can be expected that exophoric reference will be more frequent in conversation than in written language.

2 *Material and method*

The aim of the present investigation is to describe the exophoric function of the pronouns IT, THEY, HE, and SHE in a corpus of English conversation. The study is part of a more extensive investigation I have carried out on the referential function of third person pronouns. The corpus I have used is the London-Lund corpus of spoken English (LLC). This corpus comprises "texts" of spoken language ranging from face-to-face spontaneous conversation, recorded surreptitiously, to prepared but unscripted oration. The texts consist of c. 5000 words each and have been subject to a painstaking prosodic and paralinguistic analysis at the Survey of English Usage, University College London. The material was taken over in 1975 by the Survey of Spoken English in Lund where we have transferred it to computer magnetic tape in order to make it available to researchers all over the world.[2]

For this study eight texts were chosen from the category of spontaneous face-to-face conversations, surreptitiously recorded. In all, these eight conversations amount to 40.000 words. The speakers are all educated British people. In six of the texts (1.1, 1.3, 1.4, 1.5, 1.6, 1.8) the speakers' relationships have been described as "intimate and equal", i.e. they are colleagues and friends. There are between two and four speakers per text. In the remaining two texts (3.3, 3.4) there are six participants per text, and the relationships have been characterized as "distant".

The texts were chosen to satisfy the following criteria: Each text should consist of one whole conversation. There are texts which consist of several subjects to add up to the stipulated 5000 words, but none of these have been included. I also excluded texts in which one or more non-surreptitious speakers, or speakers who were aware of being recorded, participated. These speakers functioned as 'prompters' and were to keep the conversation going.[3]

In the present study, IT represents not only 'it' (i.e. the word forms *it, its, itself*) but also the demonstratives 'this' and 'that' in head function. In this function 'this' and 'that' refer in their own right just like 'it'. As determiners 'this' and 'that' were not included as they have no independent function of reference. THEY denotes 'they' (*they, them, their, theirs,* and *themselves*) as well as 'these' and 'those' in head position. HE denotes the word forms *he, him, his, himself*; SHE denotes *she, her, hers,* and *herself*.

The pronouns can occur either in *simple references*, i.e. there is only one pronominal instance per referent, e.g.

look at *him*

or they occur in what I called *chains*, i.e. two or more instances of the pronoun referring to the same referent, e.g.

look at *him, he* seems fairly young

All coreferential pronouns included in a chain refer to the same exophoric referent. The fact that there is also an endophoric relation between the pronouns in a chain has been disregarded in this study. Only the exophoric relation to the original referent has been taken into account.

The pronouns were classified and coded according to the following scheme:

IT

XG - exophoric, general
XSC - exophoric, specific, ref. to context-of-situation
XSS - exophoric, specific, ref. to setting

THEY

XG - exophoric, general
XSHS - exophoric, specific, ref. to humans in the setting
XSOS - exophoric, specific, ref. to objects or phenomena in the setting
XSHC - exophoric, specific, ref. to humans belonging to the context-of-situation

XSOC - exophoric, specific, ref. to objects or phenomena belonging to the context-of-situation

HE

XSS - exophoric, specific, ref. to setting
XSC - exophoric, specific, ref. to context-of-situation

SHE

XSS - exophoric, specific, ref. to setting
XSC - exophoric, specific, ref. to context-of-situation

The codes were fed into the computer together with other variables for texts, speakers, simple references, and chains, and a standard statistical program SPSS (Statistical Package for Social Sciences) was run with relevant options.

3 Results

As was expected, pronouns referring to an exophoric referent are much less frequent than those with an endophoric referent. Table 1 shows that only 10.7% (252/2365) of the pronouns refer to an extra-textual referent.

	N	X	Row total
IT	1002	142	1144 48.4%
THEY	429	79	508 21.5%
HE	513	31	544 23.0%
SHE	169	-	169 7.1%
Column total	2113 89.3%	252 10.7%	2365 100%

Table 1. Frequencies of endophoric (N) and exophoric (X) pronouns

IT is the most frequent pronoun. This is, of course, an obvious result as IT has a wider area of referential functions than the other pronouns. Many of these functions fall within the endophoric area, but IT is also more frequent than THEY, HE, and SHE as an exophoric pronoun. THEY comes next in frequency and, referring both to animates and non-animates, has a wider referential area than HE, which is normally restricted to male animates. The total numbers of HE and THEY are very similar but THEY is more than twice as frequent as HE as an exophoric pronoun. SHE only accounts for 7.1% (169/2365) of the whole referential pronominal material, and there is not a single instance of an exophoric SHE in a corpus of 40.000 words. HE accounted for 31 exophoric instances. One cannot help wondering whether this does not display a general tendency. In this corpus people do not speak very often about females. And, if females are referred to with SHE at all, those who refer are mostly females themselves. One should perhaps ask: Is this significant for our society? Do we not talk about women? And, why do men not talk more about women?

IT

	1.1	1.3	1.4	1.5	1.6	1.8	3.3	3.4	Row total
'it'	6	11	18	2	4	9	2	9	61 43.0%
'this'	2	5	19	1	1	8	3	5	44 31.0%
'that'	-	1	22	-	2	12	-	-	37 26.1%
IT	8	17	59	3	7	29	5	14	142 100%

Table 2. IT: Frequency of IT with exophoric referent

Table 2 shows how exophoric IT is distributed over the eight texts. It also shows the proportions of 'it', 'this', and 'that' to IT. The most frequent variant is 'it'; 'this' and 'that' are fairly similar in number (44 and 37, respectively). 1.4 and 1.8 have the largest proportion of 'that'. These two texts have one main topic in common. In both texts, university colleagues are choosing pictures for their office walls. This involves a great deal of pointing and also use of 'that'. This conversation topic is also reflected in the total number of IT for these texts; 1.4 has 59/142 exophoric IT, and 1.8 has 29/142; these are the highest figures. Again, the discussion of pictures involves a great deal of pointing and exophoric reference to the pictures. The frequencies for the remaining texts are low, between 3 and 17, and it is hard to say anything about them.

	1.1	1.3	1.4	1.5	1.6	1.8	3.3	3.4	Row total
XG	6	9	-	2	4	-	2	-	23 16.2%
XSC	-	4	-	-	1	-	-	-	5 3.5%
XSS	2	4	59	1	2	29	3	14	114 80.3%
Column total	8	17	59	3	7	29	5	14	142 100%

Table 3. IT: Types of exophoric reference

Table 3 shows that reference to the setting (XSS), i.e. to phenomena that can be seen, heard, etc. is by far the most common type in the entire material. If we look at the individual texts, however, it is quite obvious that texts 1.4 and 1.8 are special in this respect also. 1.4 has 59 cases of IT referring to the setting and no case of general exophoric reference or reference to the abstract context-of-situation. All instances of exophoric reference in 1.8 (29) also belong to the same category. Exophoric reference to the context-of-situation is on the whole very rare, only 5 instances (3.5%). General exophoric reference amounted to 16.2%.

Tables 4 and 5 show the frequencies and types of simple references and chains. Of the simple references (only one pronoun referring to a referent), 58.5% refer to the setting and 39.6% have a general exophoric reference. Specific reference to the context-of-situation hardly occurs. For the individual texts the frequencies are too low to form any basis for comparison. 1.8 has the largest number of simple references, however, and they are XSS. 1.3 has 11 simple references divided between XG and XSS.

	1.1	1.3	1.4	1.5	1.6	1.8	3.3	3.4	Row total
XG	6	7	-	2	4	-	2	-	21 39.6%
XSC	-	-	-	-	1	-	-	-	1 1.9%
XSS	2	4	7	1	2	12	1	2	31 58.5%
Column total	8	11	7	3	7	12	3	2	53 100%

Table 4. IT: Simple references – type of X referent

	1.1	1.3	1.4	1.5	1.6	1.8	3.3	3.4	Row total
XG	-	1	-	-	-	-	-	-	1 3.3%
XSC	-	1	-	-	-	-	-	-	1 3.3%
XSS	-	-	17	-	-	7	1	3	28 93.3%
Column total	-	2	17	-	-	7	1	3	30 100%

Table 5. IT: Chains – type of X referent

Table 5 shows the distribution of exophoric chains over types and texts. There are 30 chains in all, and as many as 28 (93.3%) are XSS. There is one striking figure, viz. 17 for text 1.4. As we know, 1.4 and 1.8 have one common main topic. When studying these conversations closely one can, however, perceive one difference between them. The speakers in 1.4 seem more intimate and used to one another than those in 1.8. Their "common ground" seems large. They even manage to keep several chains, relating to different referents and topics, going on at the same time. This may be one reason for the figure in 1.4. The speakers in 1.8, although also intimates, use more simple references, thus probably repeating the pointing procedure when they refer to an object in the setting.

There were 53 simple references and 30 chains. The chains contained in all 89 instances of IT. The average number of ITs per chain is 3.

THEY

	1.1	1.3	1.4	1.5	1.6	1.8	3.3	3.4	Row total
'they'	4	13	10	18	5	15	9	-	74 93.7%
'these'	-	-	3	-	-	-	-	-	3 3.8%
'those'	-	-	-	-	-	2	-	-	2 2.5%
THEY	4	13	13	18	5	17	9	-	79 100%

Table 6. THEY: Frequency of THEY with exophoric referent

The proportion of 'they' to THEY is much larger (93.7%) than the proportions of 'these' and 'those' (see Table 6). There are only very few cases of 'these' and 'those'. The distribution of THEY over the texts is also shown in Table 6. The number of exophoric THEY varies between 0 and 18. Text 3.4 has not one single instance of exophoric THEY.

	1.1	1.3	1.4	1.5	1.6	1.8	3.3	3.4	Row total
XG	-	-	1	-	-	-	-	-	1 1.3%
XSHS	-	-	-	-	-	-	-	-	-
XSOS	-	-	3	-	-	12	-	-	15 19.0%
XSHC	4	13	9	18	5	5	9	-	63 79.8%
XSOC	-	-	-	-	-	-	-	-	-
Column total	4	13	13	18	5	17	9	-	79 100%

Table 7. THEY: Types of exophoric reference

Table 7 reveals that 79.8% of exophoric THEY refer to humans in the context-of-situation, i.e. to people who are not mentioned but who are easily identified by the speakers through their knowledge of the situation. Two texts have instances of THEY referring to objects in the setting. Text 1.4 has 3 instances and they all refer to the pictures under discussion. Text 1.8 has 12 instances and 11 of these refer to the pictures. This topic obviously has a strong influence. There are no references to humans in the setting or to objects in the context-of-situation.

Tables 8 and 9 show the frequencies and types of simple references and chains. There are 20 simple references (Table 8) of which 17 (85%) refer to humans in the contex-of-situation. Of 16 chains (Table 9) 13 refer to humans in the context-of-situation and 3 to objects in the setting. The 16 chains contained in all 59 instances of THEY. Thus a chain contains on an average 3.7 instances of THEY.

	1.1	1.3	1.4	1.5	1.6	1.8	3.3	3.4	Row total
XG	-	-	1	-	-	-	-	-	1 5%
XSHS	-	-	-	-	-	-	-	-	-
XSOS	-	-	1	-	-	1	-	-	2 10%
XSHC	2	1	-	7	3	1	3	-	17 85%
XSOC	-	-	-	-	-	-	-	-	-
Column total	2	1	2	7	3	2	3	-	20 100%

Table 8. THEY: Simple references – type of X referent

	1.1	1.3	1.4	1.5	1.6	1.8	3.3	3.4	Row total
XG	-	-	-	-	-	-	-	-	-
XSHS	-	-	-	-	-	-	-	-	-
XSOS	-	-	1	-	-	2	-	-	3 18.8%
XSHC	1	1	3	4	1	1	2	-	13 81.2%
XSOC	-	-	-	-	-	-	-	-	-
Column total	1	1	4	4	1	3	2	-	16 100%

Table 9. THEY: Chains – type of X referent

HE

	1.1	1.3	1.4	1.5	1.6	1.8	3.3	3.4	Row total
XSS	-	-	-	-	-	1	2	-	3 9.7%
XSC	-	-	13	4	-	11	-	-	28 90.3%
Column total	-	-	13	4	-	12	2	-	31 100%

Table 10. HE: Types of exophoric reference

There are only 31 cases of exophoric HE in the whole material (Table 10). Of these as many as 25 occur in the texts 1.4 and 1.8. All the 13 instances in 1.4 refer to the same person, who in fact is the one who has offered the speakers the choice of pictures. This person is then closely bound to the context and it is rarely necessary to mention him by name. In 1.8, 8 of the 12 instances of HE refer to the same person, who seems to be identical with the person in 1.4. Tables 11 and 12 show that there are only 3 simple references and 4 chains of exophoric HE. There are 2 chains, 1 in 1.4 and 1 in 1.8, that refer to the same person. These 2 chains are also very long. A chain contains on an average 7 instances of HE.

	1.1	1.3	1.4	1.5	1.6	1.8	3.3	3.4	Row total
XSS	-	-	-	-	-	1	2	-	3
XSC	-	-	-	-	-	-	-	-	-
Column total	-	-	-	-	-	1	2	-	3

Table 11. HE: Simple references – type of X referent

	1.1	1.3	1.4	1.5	1.6	1.8	3.3	3.4	Row total
XSS	-	-	-	-	-	-	-	-	-
XSC	-	-	1	1	-	2	-	-	4
Column total	-	-	1	1	-	2	-	-	4

Table 12. HE: Chains – type of X referent

Conclusion

As this is a descriptive study of pronominal exophora in conversation only, no comparative results of differences between the spoken and the written channels can be given. The results of the investigation showed, however, that exophoric pronouns were much less frequent than endophoric pronouns. They also showed that the exophoric pronoun groups differed in frequency, which could probably be explained by the difference in their number of functions.

Reference to the setting was the most frequent type of exophoric reference of IT. The texts varied to a large extent, however, and the conversation topic seemed to have a decisive effect. The most frequent type of THEY was reference to humans known in the context-of-situation, i.e. humans belonging to the speaker's area of shared knowledge. There was one exceptional text where reference to objects in the setting was most frequent. This could be explained by the specific topic. Topic was also a factor that explained that reference to males known in the context-of-situation was the most frequent type of HE. There was obviously no factor that created the need for using SHE with exophoric reference.

Although it is difficult to decide what variables can give rise to the use of an exophoric pronoun in conversation, topic seems to be important. The extent of the speakers' shared knowledge is certainly also important. There seem to be no obvious connections between the results and other variables such as the speakers' age, sex, and profession. Although the frequencies were in many cases too low to form a basis for such assumptions, I have come to the same result in the more extensive investigation I have carried out.

To conclude, then, it can be said that there must be certain specific situations characteristic of spontaneous speech that give rise to exophoric use of pronouns. If the speakers discuss objects and persons in the setting, they tend to use exophoric pronouns. If a man is discussed, this influences the frequency of HE; and if the man is in some way central to the speakers and what they are talking about, that is likely to influence the frequency of the exophoric use of HE.

NOTES

[1] The scope of exophoric reference is not quite agreed on. Lyons (1977:672f.) has a wider definition of anaphora, which includes reference that would elsewhere be defined as exophora. Gutwinski (1976:67) has a more restricted definition of exophora.

[2] For a detailed description of the corpus, see Svartvik & Quirk 1980.

[3] At a fairly late stage, however, I was informed by the Survey of English Usage in London that two of the speakers in 1.3 (a text I had included) in fact had known about the recording. Nevertheless, I decided to keep the text as these speakers had only uttered small numbers of words, which would be of no statistical significance.

[4] As has been mentioned, all pronouns included in an exophoric chain have been counted as exophoric here.

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From function to structure.
Some pragmatic determinants of syntactic frequencies in impromptu speech

Abstract. To explain why negation is more than twice as frequent in conversation as in written language, a detailed study of 15.000 words of recorded conversation was carried out. It was found that rejections and explicit denials of previously asserted propositions, two functional categories of negation that had been postulated to be speech-specific, accounted for only c. 16 per cent of all negatives. Including negatives as supports, in direct questions and imperatives, as well as the tendency to repetition in spoken language, accounted for 37 per cent in all. Ongoing work seems to indicate that factors such as the degree of interaction, and the expression of modality and mental attitudes, which often cooccurs with the use of negation, will also prove to have explanatory value.

Although there has been at least a certain degree of consensus regarding the goals to be pursued in linguistics (as indeed in other branches of science and scholarship) – observational, descriptive, and explanatory adequacy – there has been little agreement concerning the question of what constitutes explanatory adequacy. The debate has centred largely on the issue of what constitutes a 'permissible' explanation, or, more precisely, on the question where explanatory material may be culled. Structuralists of different persuasions have denied the validity of anything but intra-linguistic argumentation, and it is only in recent years that it has become evident to a large number, perhaps even a majority, of linguists on either side of the Atlantic that explanations of linguistic phenomena can, and often must, be sought outside language proper, in the communicative situation where the linguistic specimen under investigation is produced. Indeed, discourse, or pragmatic, factors often absolutely determine the form as well as the content of what is said or written.

Our purpose in this paper is to investigate some pragmatic determinants of syntactic frequencies in impromptu speech, ie conversation. Our examples will concern negation and will be drawn from a subsample from *A Corpus of*

English Conversation (Svartvik & Quirk 1980). Our analytic categories will be based on Tottie, Where do negative sentences come from? Towards a pragmatic theory of negation (In press, 1982). Another purpose of this study is to test the categories postulated in that theory (henceforth PT), as well as its predictive power.[1] (Notice, however, that the claims of the theory are modest: it refers only to declaratives and explicitly excludes such constructions as questions, imperatives and counterfactuals.)

As a point of departure we make a formal definition of negation and include the following negative expressions, or negatives for short:

> *not* (including contracted forms), *never*, *no* (as a determiner), *none*, *nothing*, *nobody*, *nowhere*, *nor*, *neither*, the proform *No*, and forms including the negative affixes *a-*, *dis-*, *in-*, *non-*, *un-*, and *-less*.

We thus exclude 'inherent' negatives such as *miss*, *fail*, *lack* etc. for philosophical as well as practical reasons (cf PT for a full discussion of the problem), and also 'incomplete' negatives such as *hardly*, *scarcely*, *seldom*, *few*, as they sometimes do not confer full sentence negation at all. (Cf. Jespersen 1917:38f. and Tottie 1977.)

In order to make interesting observations concerning syntactic frequencies in conversation, we need a relevant sample of written language with which we can compare our conversational sample, and which will thus provide the necessary contrast. The point of departure of this study consists of some observations on the frequency of negation in two samples of 50 000 words each spoken and written material from the Survey of English Usage at University College London. The distribution of negatives in the two samples is shown in Table 1.

Table 1 shows that there is more than twice as much negation in the spoken material (S) as in the written texts (W): 1381/50 000, or 27.6 negatives per thousand words in S, compared with 643/50 000, or 12.8/1000 words in W. We can also express the ratio of negation in W compared with that in S as a percentage: 643/1381 equals 47%. The use of the reaction signal or sentence pro-form *No* in S obviously contributes to this discrepancy, but only marginally; even if the 265 instances of *No* are deducted, there are still 1116 negatives in S. Expressed as a percentage we get 643/1116, or 58%.

CATEGORY	INTRA-SENTENCE	SENTENCE PRO-FORM	TOTALS	NEGATIVES PER 1000 WORDS
SPOKEN	1116	265	1381 (68%)	27.6
WRITTEN	643	-	643 (32%)	12.8
S + W	1759	265	2024	20.4

Table 1. The distribution of negation in two samples of contemporary British English, 50 000 words spoken and 50 000 words written language.

As a step towards accounting for the difference in the frequency of negation between S and W, the fragment of a pragmatic theory – PT – mentioned above was set up. In PT, the following partial classification of negatives was proposed:

I REJECTIONS (including REFUSALS)

II DENIALS (a) EXPLICIT
(b) IMPLICIT

Category I, REJECTIONS, involve volition and thus have an expressive function. They are independent of language. Thus a dog can refuse to eat its food or to come when called, and humans can convey rejections and refusals by non-linguistic means. (It seems likely that there should also be a further subdivision into EXPLICIT and IMPLICIT REJECTIONS. Cf. below.)

DENIALS are language-dependent. EXPLICIT DENIALS occur in response to explicit assertions of propositions, whereas IMPLICIT DENIALS deny propositions that can be contextually inferred but which have not been explicitly asserted. There is syntactic as well as pragmatic evidence for the establishment of the dichotomy explicit/implicit denial; thus, for instance, elliptic sentences such as *He isn't* or *I don't* can only be explicit denials occurring in response to explicit assertions. (For further substantiation of these categories, see PT and, for implicit denials, Shanon 1981:42.)

Implicit denials can of course occur in spoken language as well as in writing, but it seemed not implausible that the difference in the frequency of negation between S and W could be due to the non-occurrence, or at least the much lower frequency of occurrence, of rejections and explicit denials in W.

To test this hypothesis, we made a detailed empirical study of the functions of the negatives occurring in a subsample of 15 000 words from the spoken corpus described above. We included three texts of 5 000 words each, S.1.3, S.1.4, and S.1.5. These texts all form part of the London-Lund Corpus of English Conversation, and are all instances of spontaneous, surreptitiously recorded conversation. The texts are available in print in Svartvik & Quirk 1980, who also supply further information about participants etc.

The distribution of forms in the subsample is shown in Table 2.

TEXT	NON-AFFIXAL FORMS	AFFIXAL FORMS	PRO-FORMS NO	TOTALS	NEGS PER 1000 WORDS
S.1.3	80	16	5	101	20.2
S.1.4	138	6	25	169	33.8
S.1.5	123	12	30	165	33
	341	34 (78%)	60 (8%)	435 (14%)	29

Table 2. The distribution of negatives in the 15 000 word sample.

Notice first that the frequency of negation is lower in text S.1.3 than in the other two, 20.2 per 1000 words compared with 33 or more in the other two. This fact will be discussed below. In all, there were 435 negative tokens, 34 of which (8%) were affixal and 60 of which (14%) consisted of the pro-form *No.*[2] However, eight of the 435 tokens could not be submitted to a pragmatic analysis, for the simple reason that they occur in the first turns of texts, or after intranscribable passages, where it was thus not possible to determine whether they were explicit or implicit negatives. The final sample therefore comprised 427 negatives.

Another problem had to be dealt with before we could make a final analysis of the data. It is a well-known fact that there is not always perfect correspondence between the syntactic form or the normal semantic interpretation of a sentence, and its discourse function. Statements may serve as questions, questions as exclamations, etc. (Cf. e.g. Quirk *et al.* 1972:387.) In our sample, there were 48/427 (11%) sentences where such discrepancies occurred. One of these, (1) was an explicit denial functioning as an (explicit) rejection. Speaker A offers speaker B some coffee, which B first accepts, but than changes his mind. (Numbers refer to tone units (TUS), asterisks indicate simultaneity, and letters identify speakers. Double parentheses surround 'incomprehensible words'.)

(1) A 15 *that's good*
B 16 *I don't know*
17 I ((don't know whether I'll)) drink coffee at this time of day (S.1.4)

(TUs 16 and 17 illustrate another salient feature of conversation, to which we shall have occasion to return below, viz. repetition.)

By far the largest class of sentences having non-identity of functions was made up of items whose grammatical function was that of implicit denials but which had different discourse functions. There were 47 of these. Five functioned as implicit rejections, as in (2), where the participants are choosing pictures for their offices and where they reject them without previous verbal prompting, as in TU 77:

(2) B 71 ((and)) then he said well don't bother
72 [fʌə] ((now)) you've told me
73 you know
74 you just come
A 75 that was this term
B 76 m
A 77 well I don't know
78 that I want any of ((these)) (S.1.4)

Another eight functioned as questions. Cf. TU 510 in (3):

(3) A 506 [ðiəm] · this · ghastly set-up
508 of of a woman's college
509 which is just another world
510 I don't know if you've had any dealings with * ((it)) *
511 it's just grotesque
512 there's
c 513 * no * (S.1.3)

The largest subgroup here, 34/47 tokens, was made up of supports, ie listeners' signals that information has been received, accepted and agreed upon. (Cf. Oreström 1977 and Bald 1980.) A typical example is TU 431 in (4):

(4) A 428 but I left that out
429 * because *
B 430 * yes *
A 429 it wasn't typical
B 431 no (S.1.4)

After analyzing the items with non-identical grammatical and pragmatic functions, we are now in a position to make a survey of the pragmatic functions of all negative sentences in our subsample.[3] This is done in Table 3:

FUNCTION	DENIALS		REJ		QUESTIONS			HYP	IMP	SUPP	TOTALS
	E	I	E	I	+T	-T	IND				
=	63	263	1	0	21	6	7	16	1		378
≠			1	5		9				34	49
ALL	63 (14%)	263 (62%)	2+5 (2%)		21 + (8%)	15	7	16 (4%)	1	34 (8%)	427

Table 3. The distribution of pragmatic functions over 427 negative sentences taken from 15 000 words of English conversation.

Key: REJ = REJECTIONS, E = EXPLICIT, I = IMPLICIT, T = TAG, HYP = HYPOTHETICALS, IMP = IMPERATIVE, SUPP = SUPPORTS

= indicates identity of grammatical and pragmatic functions,
≠ non-identity

From Table 3, we see that explicit denials amounted to 63/427, or 14% of all negative sentences, and rejections (explicit and implicit) to 7/427, or 2% of the total sample. Together, these two categories thus accounted for 70/427, or 16% of all uses of negative sentences. Our hypothesis that the occurrence of these types might explain the higher frequency of negation in spoken language is thus not supported by the data.

However, a couple of other uses of negation, which are almost exclusively restricted to conversation, are of considerable interest for the explanation of the high incidence of negation in this channel, as supports and in questions (tags and non-tags). (Even without a detailed analysis of the written sample, it seems safe to contend that direct questions are infrequent in written language, having mostly a rhetorical function, while indirect questions may of course be expected to occur.) There were 21 tag questions and 22 non-tags. Seven of the latter were indirect questions, which leaves us with 15 non-tag direct questions. Together with the 21 tags, they account for 8% of the negative sentences.[4] Furthermore, the 34 supports account for another 8% of the total. The hypotheticals are best left out of the discussion here, as they might be expected to occur with at least equal frequency in written texts and we have no data on their frequency at present.

If we sum up the frequencies of occurrence of explicit denials (63), rejections (7), questions (36), supports (34), and the one imperative, we arrive at a total of 141/427 negative sentences used in functions characteristic of conversation, or 38%. Implicit denials remain, by far, the largest category, with 263/427, or 62%, of all tokens. This is still a considerably higher proportion than the 47% total recorded for the written sample discussed above, and which, according to our hypothesis, should consist of mostly implicit denials.[5] However, we still have a couple of cards up our sleeve.

First, it is well known that one characteristic of impromptu speech is repetition. (Cf. e.g. Ochs 1979:70ff.) Explicit denials typically seem to consist of the reaction signal *No* plus an explanatory statement, as in (5), TUs 423 and 424:

(5) A 420 I mean is Marilyn . . .
421 . . . I mean is she a lecturer
422 * or *
B 423 * no *
424 Marilyn does no teaching (S.1.5)

Repetition for emphasis is exemplified in (6), TUs 1210 and 1211:

(6) A 1205 . . . in fact I won't see
1206 the general department
1207 will*I
1208 very*much
D 1209 * oh no*
1210 no
1211 no (S.1.5)

Self-correction, or repair, may also cause repetition, as in (7). (Cf. Schegloff *et al.* 1977.)

(7) A 655 I mean one's never
656 I mean you're making – conclusions
657 which you can never really verify (S.1.5)

Repetitions may also be used as a floorholding device, to prevent another speaker from taking over the turn. When one has access only to a written transcription, this use is hard to distinguish from repetition due to performance factors, when the speaker repeats old material while trying to continue by adding new words and phrases. Example (1), TUs 16-17, above may be an instance of either of these types.

There were, in all, 34 instances of negatives in repetitions (not counting those included among supports). This figure is clearly interesting as a factor contributing to the high total frequency of negatives in spoken language. However, in this context, where we have already deducted explicit denials and rejections among the conversation-specific phenomena, our main concern is to find the number of repetitions among implicit denials. There were only 16 of these in all three texts, or 4%. By adding this to the 141/427 speech-specific functions of negation, we get 157/427, or 37%. Although we have certainly found some pragmatic determinants of the occurrence of negation, there must obviously be other factors at work as well.

We are currently pursuing two lines of inquiry in search of such factors. First, as we observed above in connexion with the data in Table 3, the frequency of negation is much lower in text S.1.3 than in S.1.4 and S.1.5 –

101 compared with 169 and 165, respectively. Text 1.3 is different in character from 1.4 and 1.5 in that it is much less interactive. Only one speaker is recorded surreptitiously, and the other two, who act as prompters, are obviously making a successful effort to say as little as possible. In fact, text 1.3 has many of the characteristics of a monologue. We cannot be sure, of course, that the low frequency of negation in 1.3 is not due to idiosyncratic factors, but we are working on the assumption that this is not the case, trying to relate the frequency of negation to turn length and position of negation in the speakers' turns in the three texts. (Cf. Laureys 1977:168.)

Our second line of investigation has been prompted by the observation that, in our material, many negatives cooccur with the verbs *know* and *think* (n = 45). In particular, functional rejections and questions that are cast in the form of (implicit) denials typically have the form *I don't know if* . . . The tendency for negative expressions to collocate with verbs denoting mental processes has been observed in research on Swedish language material by Laureys (1977:168) and Svensson (1981:193ff.). Svensson also points to a tendency for negative sentences to contain modal verbs (almost 25% of his material). We also noticed that, in our material, 'mental verbs' tended to collocate with first and second person pronouns. We are therefore currently comparing the cooccurrence of mental verbs, modals, and first and second person pronouns with negation in our conversation sample with a sample of written language. We hope that when we have obtained these data we shall be in a position to account more completely for the difference in the frequency of negation between spoken and written English. At present, we may perhaps venture an educated guess that it is the emotional and interactive character of conversation that will ultimately provide the explanatory factors. When we speak, we express our feelings and attitudes more than when we write, but we also try to be polite and to avoid unnecessary bluntness, often by means of indirect speech acts or 'conversational mitigation' (cf. Fraser 1980). The use of modals, mental verbs, and negatives in conjunction would seem to be an appropriate means to achieve these ends.

FOOTNOTES

[1] The theory has been shown to work well for Swedish. Cf. Svensson 1981:201.

[2] For a discussion of the choice between affixal and non-affixal negation in S and W, see further Tottie 1980 and Tottie (in press).

[3] There was only one sentence having more than one negative, viz. (1):

(1) A 1 *isn't this* going to be a strange
2 and *impossible task*
3 for me (S.1.5)

The first negative was obviously classified as a (non-tag) question, and the second as an implicit denial.

[4] Implicit denials functioning as questions are not, of course, a priori equivalent to negative questions. Cf. (3) above. However, it will be expedient to treat them together here, the point being that neither type is likely to occur in written language.

[5] There may of course also be hypothetical constructions. Cf. above.

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Feedback

Abstract. In this paper which deals with feedback in Q/R exchanges I will concentrate on the *third move*, ie the questioner's verbal contribution in immediate connection with R. I will comment on its various functions and lexical, prosodic and syntactic properties. My main concern is feedback as a confirmation of R and the way this is realized will first be discussed in terms of *implicitness* and *explicitness*. Reference will be made to differences in the use of feedback when it comes to face-to-face and telephone conversation and also to differences among individual texts. Finally, I will comment on some lexical items which occur both with feedback and R-function.

Follow-up moves and supports

Feedback is a recurrent phenomenon in human interaction in general and takes various forms. In discourse, two variants of feedback may be distinguished: 1) what is generally referred to as Backchannel items (see eg Yngve, 1970 and Duncan, 1973) but which I prefer to call *Supports* (following Oreström, 1977) and 2) *Follow-up moves* (see Sinclair & Coulthard, 1975).

Follow-ups (FUP) and Supports (SUP) are variants of the same phenomenon and have certain fundamental characteristics in common: they both indicate that information has been received and they are both needed in discourse interaction; if they were missing the speaker might start wondering if the hearer was really listening, he might get irritated and finally give up talking. But apart from these fundamental characteristics, they differ considerably in discourse function despite the fact that they often have the same or similar formal realizations. The basic differences may be seen in diagram form

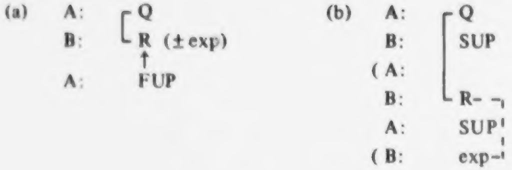

Fig 1 Follow-ups and Supports

What distinguishes the two in the first place is that FUP is a turn in its own right uttered as a reaction to R whereas no speaker-shift takes place in the case of SUP. SUPs may occur anywhere in the ongoing speech without causing the current speaker to give up the floor. It also appears in Fig 1 that FUP moves (generally) constitute the end-move of an exchange whereas an exchange like (b) is open-ended. The examples below illustrate the main distinctions:

```
                            /          /
(1)  B:   Q     /there's a cassETTE  {/GOES with 'that//}// .
                  \
     A:   R     /YEAH//
                  \
     B:   FUP   /WOwee// .                                     3.2c
                                                               867-870
                                                \
(2)  C:   Q     /which do you 'think you'll : ((FALL)) for//

     A:   R     well I /don't think I 'want to ((2 sylls)) you /know
                                                 V
                they're a !bit !too sort of ": STRONG// .
                     /
     C:   SUP   + /[M]// +
                               /
   ( A:         +for+ /my ROOM// -
                                                          \
                /so I !thought I'd wait till he had another LOT//
                     \
     C:   SUP   + /[M]// +
                                  V
     A:       . +I+ /like ! !THAT one best//                   1.8
                                                               402-408
```

(1) and (2) differ first of all in that the questioner continues being the current speaker in (2) but not in (1). The evaluate act in (1), *wowee*, is a clear indication of speaker B's appreciative attitude to R and constitutes the end move of the Q/R exchange. In (2) it is obvious that speaker C has no intention of taking the turn but that he produces these *M*s just to show that he is listening and that he is anxious to hear what speaker A has to say. Note the encouraging rising tone on the first instance of *M*.

SUP moves have the following characteristics:

- they are no turns in their own right and thus do not involve speaker-shift
- they may be inserted almost anywhere in the ongoing speech
- they are often uttered simultaneously with part of the ongoing talk (overlap)
- they are mostly uttered fairly low, often with characteristic intonation
- they may be accompanied by body-motion
- they are replaceable by body-language

Situation

The occurrence of feedback varies according to discourse situation. In classroom interaction for instance, feedback is a required and natural component which serves as a pedagogic device. According to Sinclair & Coulthard (1975) the function of FUP moves is to tell the pupil whether he has performed well or badly.

Burton (1978) is of the opinion that feedback or Follow-up is not a normal feature in ordinary conversation but that it might be seen as a recurrent element in what she refers to as ritual encounters and extended formal talk. Follow-up may occasionally occur, she says, in informal conversation as a sarcasm device.

What actually happens, judging by the study of Q/R exchanges in ordinary conversation, is that FUP moves (see Ex 1) prove to be frequently recurring phenomena (cf Table 1), being neither sarcasm devices nor a means for the speaker to tell another participant that his performance is good or bad. It would be totally wrong, however, to argue that FUPs work the same way inside as outside the classroom. In the classroom, they are part of the teaching technique; in ordinary face-to-face conversation, on the other hand, where nods, headshakes, and facial expressions may replace verbal signals, there is much less constraint on the questioner to indicate verbally that he heard R or to make comments on R. Verbal FUPs might even be left out without an immediate break in communication as a result.

Explicit/Implicit

I regard FUP moves in the first place as *the questioner's confirmation of or reaction to R*. There are two ways in which FUP can be manifested, either explicitly or implicitly, and before going into a detailed discussion of FUP moves in the data, I will consider an approach which presupposes implicit interpretation.

Before undertaking this study I assumed that interrogative exchanges consisting of a Q and an R followed by a confirmation, realized by a FUP move were almost as common in spontaneous conversation as exchanges consisting of merely Q and R. However, I was not inclined to go as far as eg Mishler (Lang.Soc.4: 31-51) who claims that Q-R-confirmation is the natural unit for Q-initiated conversation. He argues that mere Q/R exchanges seem totally inapplicable as a basic unit in 'open' natural conversation and states that not only does a Q 'demand' an R but R demands further 'response' from the questioner. He assumes that the questioner must indicate by some kind of 'sign' that his Q has been responded to, no matter whether this R is adequate or inadequate, appropriate or inappropriate. To verify his assumption he studied 'natural' conversation in four first-grade classrooms, concentrating on units which consisted of successive Q-R-confirmation utterances, and found that 86 % of all Q/R sequences were followed by a confirmation which, he points out, is almost equal to the rate of Rs to Qs; in other words, in his study all but 14 % of the Q/R sequences were followed by a confirmation.

The high percentage of sequences ending in confirmation is, however, partly due to Mishler's data, classroom interaction, but even more to his definition of confirmation which runs: 'If the third speaker, in a sequence of three successive utterances initiated by a question, was the same person as the questioner, then this third utterance was counted as a confirmation' (Lang. Soc. 4:33). This definition implies that the function of the utterance is the automatic result of its position in the sequence, ie if the speaker has the right identity. In the following example Mishler illustrates how interrogative exchanges are connected by a confirmation which at the same time functions as a Q initiating a new exchange (the indication of double function, C/Q, is mine).

(3)
I Q S1: Did you really finish all your work before everybody else?
R S2: Yeah.
II C/Q S1: *What kind of work was it?*
R S2: Well. We just had a piece of paper and it had all the names on it. And we had to see if it was odd or even.
III C/Q S1: *Do you know all the odd numbers and all the even numbers?*
R S2: Uh huh.
C/Q S1: How far up can you count?

There are three interrogative units (I - III) which are connected by having one utterance in common; *What kind of work was it?* connects units I and II, *Do you know all the odd numbers and all the even numbers?* connects units II and III.

There are two seemingly divergent but interconnected reasons why these 'third utterances' acquire the function of confirmation; one is by their position in the turn-taking system, the other is by implication. As I see it, they are no confirmations in themselves. The mere fact that S1 goes on speaking immediately after S2's R does not necessarily mean that he confirms the R. Take eg

(4)
I [Q S1: Did you really finish all your work before everybody else?
[R S2: Yeah.

II [Q S1: Did you play with Paul yesterday?
[R S2: No he never turned up.

or

(5)

I Q S1: Did you really finish all your work before everybody else?
R S2: Yeah.

II Q S1: I think I'll go to the movie tonight. What about you?
R S2: I'd love to.

The only way of regarding the third utterance in (3) as confirmation is by implication, which is illustrated in the expanded version below

(3_1)

I Q S1: Did you really finish all your work before everybody else?
R S2: Yeah.

II C/Q S1: Good. What kind of work was it?
R S2: Well. We just had a piece of paper and it had all the names on it. And we had to see if it was odd or even.

III C/Q S1: I see. Do you know all the odd numbers and all the even numbers?
R S2: Uh huh.
C/Q S1 Fine. How far up can you count?

The more loosely the interrogative exchanges are connected as far as topic is concerned, the more far-fetched this procedure becomes. This becomes apparent if one tries to expand the third utterance in (4) and (5) above on the same lines as (3).

Mishler also gives an example of what I shall call *explicit* confirmation or confirmation *in its own right* and which I will discuss in some detail

(6) Q S1: Ohhoh. What's he got here?
R S2: Skis.
R S3: Skis.
C S1: *Wooooow. I would love to ski.*

The interjection *Wooooow* expresses S1's reaction to R, which is furthermore emphasized by the approving phrase *I would love to ski.* Since I will not deal with implicit confirmation my definition of confirmation or FUP differs considerably from that of Mishler (cf p 3) which, in my opinion, is a mix-up of turn and function.

Variants

A close examination of the data made clear that there are three variants of explicit FUP moves which I will refer to as FUP_1, FUP_2 and FUP_3.

FUP_1 is defined as follows:

> it indicates the questioner's attitude to and estimation of R and is realized by assent (ass), evaluate (eval) and comment (comm) acts

FUP_1 is the 'normal' FUP move by which the questioner expresses his attitude to R and closes the exchange. FUP_2, on the other hand, does not constitute the end of the exchange but invites confirmation realized by FUP_3. The definitions of FUP_2 and FUP_3 will be as follows:

> FUP_2 is the questioner's reaction to R which is realized by a react (rea) act

> FUP_3 is the answerer's confirmation of the questioner's reaction to R and is realized by an assent act

A diagram may be illuminating:

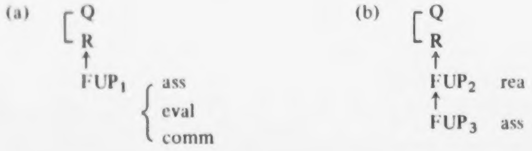

Fig 2 Follow-up variants

As to the possible structure of FUP_1 I have adopted the description of the FUP move in Sinclair & Coulthard (1975) except for the fact that I employ the term *assent* instead of *accept*. The different realizations of FUP appear in (7), (8), and (9).

(7) A: Q ((anyway)) /how do you 'find WÒRKing at//
/Uni'versity CÒLLege// - - .
B: R /TRỲing//
at /TǏMES//
A: (- giggles)
(B: /VÈry 'trying// .
A: FUP$_1$ /YÈS// .
B: REM it de/ pends on 'how I 'wake 'up in the !MÒRnings//
as /WÈLL// 5.9
164-172

Yes constitutes an assent act indicating something like 'I see what you mean'. Note that there is no indication of the appropriateness of R which is typical of FUPs in classroom interaction (cf Sinclair & Coulthard 1975:43). By *yes*, A shows that he accepts B's direct R to what he asked, *trying at times very trying*. Note the short pauses after the second *trying* and *yes* which might be significative of move ending. Moreover, the subsequent *it depends on how I wake up in the mornings as well* has been analysed as a remark (REM), ie uttered as an additional comment to R but as such not necessary for the completion of R. *Yes* is consequently not uttered as a feedback signal in the ongoing speech but as a turn in its own right.

FUP$_2$ is a variant of the FUP move which shows the questioner's reaction to R and is, in its turn, confirmed by a second FUP move, FUP$_3$, such as in

(8) B: Q +but you /don't think it's !NÈcessary// -
A: R /[ə̄ : iʔ]// .
I /wouldn't have 'said it was "ÙNnecessary//
B: SUP /[Ḿ]//
(A: - [ə:m] - - but it was /funny going to this !SÈminar// -

B: FUP$_2$ *oh you /WÈNT to 'that//*

A: FUP$_3$ */YÈS//*

+/YÈS//+ . 5.9
1079-1087

The first FUP, *oh you went to that*, does not constitute the end of the exchange but acts very much like a request for confirmation, is a Q asking for confirmation. It is responded to in the second FUP, *yes yes.* But although FUP$_2$ invites confirmation or agreement in the form of FUP$_3$ and is generally followed by a confirming expression, I do not consider it on a par with an ordinary eliciting move (Q). After all, it is first and foremost a reaction to what has just been said; it invites confirmation but the absence of a confirming move would not necessarily be noticed. The absence of a responding move to Q, on the other hand, would be highly noticed and cause problems for the following discourse.

There are borderline cases, such as the following where a confirming move does not seem to be required after the first FUP move but still occurs. The only way, it seems, of dealing with the type of FUP-pair exemplified in (9) is to regard them as instances of FUP$_2$ and FUP$_3$. In cases where the questioner's FUP move is confirmed by the answerer, I have analysed the moves as FUP$_2$ and FUP$_3$. If the questioner's FUP move is not confirmed, on the other hand, it has been analysed as FUP$_1$. Both FUP$_1$ and FUP$_3$ serve as exchange closers.

(9) B: R ++/NÒ// ++
/this is [dhi: əm] - : history of [dhi:] .

A: SUP +/YÈS//
/YÈS//
/YÈS// +

(B: +de/ velopment of the : ÈNGlish language paper// +

A: FUP$_2$ */[ḾHM]// -*
doing /Old and Middle English : dìalects//

B: FUP$_3$ */YÈS// -*

[ə] / doing [?]. and the /thing ÌS that we have had// 6.2
79-88

FUP$_2$ consists of an assent and a comment act, and what is stated in the comment act is further confirmed by FUP$_3$.

Some cases cause problems. The excerpts from text 7.1 below do not belong to the corpus proper but are included only because they are good examples of the problems I would like to mention.

(10) a: Q still not to worry listen when are we going shopping for furniture or whatever we're doing

B: R /well I've !got me : FLǍT// .

a: FUP$_2$ *you have*

B: FUP$_3$ (- laughs) */YÈS// -*

a: FUP$_2$ *you took this one -*

B: FUP$_3$ */YÈS// -*

a: FUP$_1$ *oh good .* 7.1d
1218-1224

(Text 7.1 is a partly surreptitious recording which explains why prosodic and paralinguistic markings are missing for speaker a.)

One difficulty lies in the interpretation of the sequence *you took this one – yes.* An alternative analysis to the one given in (10) would be to interpret FUP$_2$/FUP$_3$ as a Q/R sequence, ie a request for confirmation followed by a confirming R. This interpretation seems strange, however, since it is clear enough that B already knows that speaker a took the flat. I regard the second FUP pair as a mere repetition of the first in that the second might easily replace the first. Another problematic utterance is *oh good* which has been analysed as FUP$_1$. It corresponds to the definition of FUP$_1$ insofar as it signals the questioner's attitude: it consists of an evaluate act and closes the exchange. But it differs from the definition in that what it confirms is not R but the confirmation of FUP_2. Still, I regard it as a variant of FUP_1.

At first sight, (11) appears to contain a sequence similar to the one discussed in (10)

(11) b: Q_1 and you're going [?] every day

C: R_1 /oh YÈS//

b: Q_2 and . evening some evenings

C: R_2 . /NÒ//

b: Q_3 *no evenings*

C: R_3 /NÒ// they've /crammed my 'twenty-two 'hours :TEÀCH-ing// . /in during the !DÀY// . . . 7.1a 253-260

The reason why I have analysed the pairs differently is that an expansion of *no evenings* into eg 'I see, no evenings' or 'no evenings, good', which would turn it into a FUP move, seems utterly far-fetched. Speaker b apparently asks for a clarification and possible expansions of Q_3 are 'what do you mean no evenings' or 'do you mean no evenings at all'. Consequently, *no evenings* is an Eliciting move and no FUP. The three exchanges are both syntactically and pragmatically connected and form a coherent Q/R unit, but there is no FUP move to close the unit.

Other functions of the third move

Besides serving as a FUP move or a SUP, the third utterance in a Q/R exchange, ie pronounced by the speaker who asked the initiating Q, can have other functions, such as in (12)

(12) B: Q and /also !did you 'find my - - : blue and 'green 'striped
:\TIE// .

A: R I /haven't !\LOOKed for it//

B: *[ə: m] - cos I /thought I 'brought it !\WITH me//*
but I /can't 'find it ∧Any'where// . 7.2b
78-81

There are two possible interpretations of B's second utterance. It may be analysed either as an expansion of Q and part of the Eliciting move, a clue act, in which B gives additional information by saying why he thinks that A may have found his tie, or as an additional remark, REM, realized by an inform act where B gives the reason for asking Q after having heard R. In any case it cannot be considered a FUP_1 move. Normally, utterances giving additional information to Q are part of the Eliciting move, as in

(13) B: Q /could you \MENtion 'it to 'him//
clue *cos /I've in'vited 'him as \WELL//*
a: R yes - +OK+
B: FUP_1 +\OK+// + /\FINE// . . . 7.1a
1437-1441

where the Eliciting move consists of a request for action and a clue act in which the speaker gives a reason for making the request. Due to its position after R in (13) I regard the third utterance as a REM.

Chaining

In my description of Q/R sequences followed by a second utterance by the questioner I have kept to fairly regular chains. I wish to underline, however, that all sorts of intricate patterns may be met with in spontaneous speech. The most typical sequences may be summed up as follows:

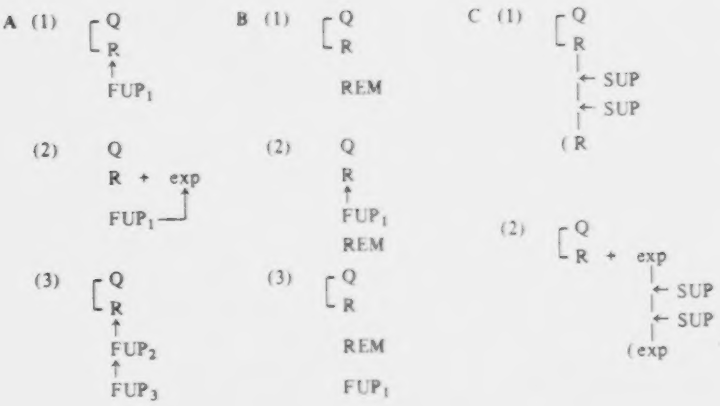
A (1)
Q
R
FUP₁
(2)
Q
R + exp
FUP₁
(3)
Q
R
FUP₂
FUP₃
B (1)
Q
R
REM
(2)
Q
R
FUP₁
REM
(3)
Q
R
REM
FUP₁
C (1)
Q
R
SUP
SUP
(R
(2)
Q
R + exp
SUP
SUP
(exp

Fig 3 Q-R-FUP models

The main distinction between FUP and REM is that FUP is typically uttered as a *reaction to R* whereas REM is *related to Q*. As to the distinction FUP/SUP, FUP constitutes a turn and involves speaker-shift whereas SUP is uttered in the course of the ongoing speech and does not involve speaker-shift.

Distribution

In order to verify the distribution of FUP moves in the data I examined 13 conversations in more detail (for a brief description of the texts, see Appendix 1).

	1	2	3	4	5	6	7	8	9	10	11	12	13	Total
Q/R exchanges	26	28	24	40	20	36	18	41	42	6	55	4	43	373
Follow-ups	8	3	7	7	9	20	3	14	21	1	22	0	25	140

Table 1 Number of Follow-up moves per Q/R exchange per conversation

The overall average number of FUP moves is very close to 38 %. But there is great individual variation among the texts, ranging from no occurrence in text 12 to 25 in text 13.

The use of FUP moves was compared in two pairs of texts which differed considerably from each other. The first pair consisted of texts 6 and 7 and the second pair of texts 4 and 13.

In texts 6 and 7 FUPs constitute roughly 1/2 and 1/6 respectively of the total number of Q/R exchanges per text. The disparity is surprising since these conversations are very similar in respect of number and type of participants, topic, and recording conditions. In both, an administrator and a group of people discuss certain matters connected with their working conditions at the university and especially in the English department. Both recordings are surreptitious. The only apparent difference between the conversations has to do with the composition of the groups involved. In text 6, the group is composed of five undergraduates but in 7 of five members of staff.

The conversations vary considerably in organization. Whereas the staff members get wrapped up in lengthy discussions about the issues brought up by the administrator, the undergraduates merely touch on the problems. Whether the difference is due to the leader of the discussion or to the other participants is an open question. It certainly seems that he is extremely explicit in the undergraduate group where he acts very much like a teacher in front of his pupils. He is also the person who asks almost all the Qs in text 7 where there are few FUPs – but also few Qs in relation to text 6.

The second pair to compare consisted of texts 4 and 13. They contain an almost equal number of Q/R exchanges (40 and 43) but show discrepancy in the number of FUP moves, 7 vs 25. Here I see the difference both as a matter of 'who talks to whom' and of 'what is being talked about'. In text 13, with 25 FUPs an academic teacher is talking to a young ex-student about strictly academic matters, such as exam papers, teaching, and conditions at other colleges. The majority of the Qs are requests for information. I cannot account for the high number of FUPs with any certainty but it is striking that there was also a high number in text 6 which is also a teacher/student conversation.

In this connection I might mention that a study of the 13 texts involved showed that FUP moves are roughly four times as common in Q/R exchanges initiated by requests for information as in exchanges initiated by requests for confirmation.

Text 4, with only 7 FUPs, is very particular insofar as half of the Qs (21 out of 40) are requests for confirmation. The speakers are three colleagues who are supposed to pick out pictures for their rooms in the department from a picture collection, and they are deliberating upon possible choices. Expressing their personal opinion they are probably anxious to know what the other participants think. A typical way of expressing one's opinion is by using a statement plus tag. These tags usually elicit an R signalling whether the answerer agrees or, more seldom, disagrees. The fact that they are not followed by an evaluation in the form of a FUP move may be seen as a direct consequence of the function of R; generally agreement (disagreement) does not invite confirmation. The examples below illustrate the difference in this respect between Q/R exchanges initiated by requests for information and those initiated by requests for confirmation

(13) B: Q:info but /why was 'Chetwynd 'Road so : CHEÀP// - - -
A: R /ah !that . there /is an answer to THÁT// -
/nobody could 'get a : MÒRTgage on it// -
B: FUP$_1$ */oh THÀT's 'right {/YEÀH//}// - -* 4.2
304-307

(14) B: Q:conf [əm] / [m?] - they're . !really 'undis!TÌNGuished// - - -
/ÀREn't they//
A: R I /THÍNK so //
/YĒS// 1.8
103-106

A special study of ten conversations, five face-to-face and five telephone, showed that the distribution of Q-R and Q-R FUP sequences varies according to manner of interaction (see Table 2).

	Q-R		Q-R-FUP		Total
Face-to-face	90	70 %	45	30 %	135
Telephone	106	40 %	165	60 %	271
TOTAL	196		210		406

Table 2 Exchange structure in relation to conversation type

Some conclusions can be drawn from the figures in Table 2:

- seen as a total, Q/R exchanges occur more frequently in telephone conversation than in face-to-face conversation. In this case, a contributing factor was probably that each telephone text consisted of a number of short conversations, in one of the texts as many as 16, and that each of these short conversations contained a proportionally larger number of Q/R exchanges than ordinary face-to-face conversations
- the distribution of sequence type varies between the two categories of conversation. In face-to-face conversation there are twice as many Q-R exchanges as Q-R-FUP exchanges; in telephone conversation, on the other hand, the number of Q-R-FUP sequences far exceeds that of Q-R sequences. It might be added, without going into detail, that the way exchanges are built up in telephone conversation is far more complex than in face-to-face conversation; the majority of the sequences are not mere Q-R or Q-R-FUP sequences
- the distribution of sequence types varies among the individual conversations, and also within each category.

The difference between telephone and face-to-face conversation referred to above seems to be the natural consequence of the fact that in telephone talk people cannot see each other's gestures and facial expressions. When you have the listener in front of you, on the other hand, you can generally read his reactions to what you are saying by his non-verbal actions. In telephone interaction these actions have to be expressed verbally.

Lexis

It appeared that R, FUP and SUP often have similar or even identical lexical realizations and four texts (7, 11, 12 and 15) were examined in some more detail for the purpose of verifying what lexical features the three move categories had in common. Table 3 gives a general survey of the use of the most frequent items.

LEXICAL REALIZATIONS	R	FUP	SUP
yes/yeah	+	+	+
m (hm)	+	+	+
yep	+		
right		+	
sure	+		
OK	+		
oh yes/no	+		+
well yes/no	+		
yes please	+		
yes quite		+	+
tag + yes		+	
I see		+	+
aha/oh		+	+
really		+	+
gosh/variant		+	+
tag			+
no	+	+	

Table 3 Lexical realizations of R, FUP and SUP

Naturally, no general statements can be made on the basis of this limited material. It indicated that in this corpus

- *yes* and *m* are met with in all three functions
- *no* alone does not function as SUP
- *right* and *sure* serve one function only, but whereas *right* occurs only as FUP and cannot replace *yes* with R-function, *sure* occurs only as R, equivalent to *yes*

- *yes quite* functions as FUP and SUP but not as R whereas *yes please*, naturally enough, only serves as R
- *oh*, *well* and tags serve as introductory items but they do not have the same distribution; *oh* does not introduce FUP, tags only introduce FUP, and *well* only occurs with *yes/no* functioning as R
- although *really* and tags often have identical function, *really* but not tags occur as both FUP and SUP.

Tone patterns

Another interesting point was to see whether the choice of tone pattern for the most common lexical realization of R, FUP and SUP, namely *yes*, *no* and *m*, varied depending on discourse function. The distribution displayed in Table 4 is based on the same four conversations (7, 11, 12 and 15). Note that these are instances of *yes*, *no* and *m* in isolation and not as initiators, which explains why so few tone directions are represented.

		↘	⋀↘	↗	⋁↗	→
YES	R	16	2			
	FUP	6				1
	SUP	1	1			2
M	R	5	1	1	1	
	FUP	7				
	SUP	3		3		
NO	R	3		1	1	
	FUP	1				
	SUP					
TOTAL		42	4	5	2	3

Table 4 Directions of tone typical of *yes*, *no* and *m* alone

Falling tone predominates for *yes*, *no* and *m* functioning as R and FUP. As to SUP it is very hard to draw any conclusions at all. There are very few instances due to the fact that SUPs rarely occur in Q/R exchanges unless R is very long. Since I have made a complete analysis of all utterances in text 15, I was able to count all instances of SUP in that single text. SUP realized by *yes* occurred in 28 places, realized by *m* in 23, and it turned out that there were 25 instances of falling tone in the *yes*-category and 10 in the *m*-category. It may be noticed that *no* occurred very seldom in any function. This is typical of the larger corpus as well.

The way eg *yes* realizes R, FUP and SUP function may be seen in diagram form

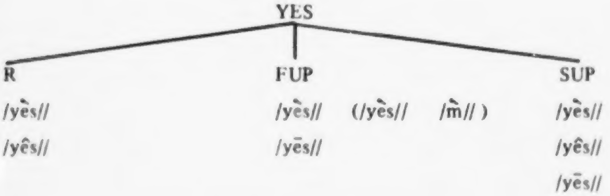

Fig 3 YES: functions and tones

Although this is not the place to deal with Rs, I would like to mention, in connection with Table 4, that the majority of Rs consisting of only *yes*, *no* or *m* were Rs to requests for confirmation, not requests for information.

It appears that *yes*, *no* and *m* are more often used to serve one function than another, and this may be represented as follows

YES	R	SUP	FUP	NO	R	FUP	SUP
M	+		-		+		-

Fig 4 Functions of *yes*, *no* and *m*

Summing Up

This study of feedback in conversation showed that FUP moves are recurrent features of discourse but that there is a marked difference in use between face-to-face and telephone conversation, which is to refer back to the inherent character of these two types of interaction, one involving copresence of the speakers, the other not. There is also variation among individual texts. It appeared that FUP moves are related to status and authority in that more were used in teacher/student interaction than in interaction between equals.

Three variants of the FUP move were discussed: FUP$_1$, the 'ordinary' FUP move which reveals the questioner's attitude to R and closes the Q/R exchange, FUP$_2$ which signals the questioner's reaction to R and invites further confirmation in the form of FUP$_3$.

A separate study of four of the conversations showed that the most frequently occurring single lexical item used as FUP was *yes*, followed by *m*, which, however, may serve both as a *yes* and a *no* variant. These items generally occur alone but are sometimes repeated or combined.

It appeared that FUP, SUP and R have certain lexical items in common, but the only items that served all three functions were *yes* and *m* in this material.

The characteristic tone pattern for *yes*, *no* and *m* functioning as R and FUP was falling whereas the few instances of SUP function did not permit any conclusions in this respect.

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APPENDIX 1 TEXT DESCRIPTION

Text number	Manner of recording		Recording conditions			Number of speakers		Speaker relations				Sex			Topic			
	Face-to-face	Telephone	Surreptitious	Part-surr	Non-surr	Two-party	Multiparty	Intimate	Distant	Equal	Non-equal	Male-male	Male-female	Female-female	Academic	General	Domestic	Specific
1.1	+		+			+		+		+		+			+			
1.2	+		+			+		+		+		+			+			
1.3	+			+			+	+		+			+		+			
1.4	+		+			+		+		+		+				+		
1.5	+		+				+	+		+				+	+			
1.6	+		+			+		+		+			+		+			
1.8	+						+	+		+			+			+		
3.2	+		+			+			+	+		+			+			
3.3	+		+				+		+		+		+		+			
3.4	+		+				+		+	+		+			+			
4.1	+				+	+		+		+			+				+	
4.2	+				+	+		+		+		+				+		
4.3	+			+			+	+		+			+					+
4.5	+				+		+	+		+			+			+		
5.8	+				+	+		+		+			+			+		
5.9	+				+	+		+		+			+		+			
5.10	+				+	+		+		+		+				+		
6.2	+				+	+			+		+		+		+			
6.3	+			+		+			+		+	+						+
7.2		+	+			+		+		+								
7.3		+	+			+		+		+								
8.1		+	+			+		+		+								
8.2		+	+			+		+		+								
9.1		+	+			+			+		+							
11.1	+				+		+		+		+	+						+

The telephone conversations – 7.2 - 9.1 – consist of a verying number of subtexts, each having its own characteristics.

APPENDIX 2

TEXT Nr	Nr in CORPUS
1	1.2
2	1.3
3	1.6
4	1.8
5	3.2
6	3.3
7	3.4
8	4.1
9	4.2
10	5.8
11	5.9
12	5.10
13	6.2

KEY to PROSODIC and PARALINGUISTIC SYMBOLS

/	onset
//	end of tone unit
{ }	subordinate tone unit
[ ]	word partials
. -	short and long pauses
+ + ++ ++	simultaneous speech
:	higher pitch level than preseding syllable
!	higher pitch level than preceding pitch prominent syllable
' "	normal and heavy stresses
/	rise
\	fall
V	fall-rise
Λ	rise-fall
—	level

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The study of Russian impromptu speech in Soviet linguistics

Abstract: The paper presents a critical survey of the studies of spoken Russian that have appeared in the Soviet Union during the last fifteen years. Having been the subject of attention for a short period in the 1920s, spoken language has not attracted much interest among Soviet linguists, whose main concern has been the forms of written language. Only at the end of the 1960s did linguists begin to record spontaneous speech on tape and study its forms. The incitement came partly from literature, where a young generation of writers reproduced 'living speech' that no traditional grammar could account for. The studies of Russian impromptu speech have mostly concentrated on syntax, since that is where the greatest differences have been found in comparison with written language.

In 1962 a brochure was published in Alma-Ata, in which the idea was put forth that the Russian language should be studied as it appeared 'in the use of its speakers'. Attention should be given to changes that had taken place during the Soviet period, linguists should again focus on the relation between society and language. This was the first time since the 1920s that social factors and society were recognized as essential to the development of language. In the first decade after the revolution there had been lively and deversified discussions on linguistic matters, but in the 1930s linguists had turned to a normative model of Russian based solely on written language, so that many concrete manifestations of language were ignored. The Russian language was then characterized as 'uniform' (*edinyj*) and 'monolithic' (*monolitnyj*), with a standard phonology, morphology and syntax. All forms not fitting into the model were regarded as deviations, and as such were not to be considered or explained but were rather to be uprooted through education. Russian linguistics became quite abstract, and the cleavage between how people spoke and what the linguists studied was considerable.

In the beginning of the 1960s a young generation of prose writers (Vasily Aksyonov and others) introduced a new prose style into Russian literature. They imitated colloquial speech in their works, with the result that slang words, syntactic fragmentation and weakened grammatical connections appeared in print. Since no traditional, normative grammar could account for such phenomena, an expansion of the field of study was called for and attention was turned to oral speech.

It is interesting to note that the study of spoken Russian does not begin in the center of the country (linguistic institutions in Moscow) but on the periphery. A group of linguists at the university of Saratov started discussing the concept of 'colloquial style, style of spoken language' that linguists had used for decades without ever clearly defining it. It seemed to many that the 'style of spoken language' could not be compared to different literary styles (journalistic style, the style of scientific publications, etc.). In 1962 a series of publications (*Voprosy stilistiki*) was started at the university of Saratov, in which forms of spoken language were studied and discussed. Although the object of study was oral speech, the Saratov linguists used written sources to begin with (dialogues from literary works, newspaper genres like the 'feuilleton' – a satirical chat on various matters). Not until the late 1960s did they begin tape-recording spontaneous speech.

The first samples of tape-recorded impromptu Russian to appear in print are found in a Czech publication (Československá rusistika 2, 1965). Influenced by their own linguistic tradition, Czech linguists were more attentive to this form of language, and Czech researchers of Russian had tape-recorded Russian speech in Moscow, analyzed it and presented samples of it before the Russian linguists began their studies.

A third impulse to study spoken Russian came from teachers of foreign languages in the Soviet Union. In 1963 a conference was held in Irkutsk on the 'Specific Structure of Oral Speech' (the proceedings were published in 1963 and 1964). This conference was followed by several others in Gorkij (*Teorija i praktika lingvističeskogo opisanija razgovornoj reči*, 1966, 1968, 1972). Thanks to these conferences Russian linguists became familiar with the problems related to the study of impromptu speech in other languages.

At the end of the 1960s linguists at the Russian Language Institute in Moscow began taperecording impromptu speech. By then the Russian term *razgovornaja reč'* was used in different meanings (Zemskaja 1970: 3):

1) any oral speech (*ustnaja reč'*)
2) the oral speech of city dwellers (*ustnaja gorodskaja reč'*)

3) the colloquial speech of city and countryside dwellers (*bytovaja reč'*)
4) spontaneous, impromptu speech of people speaking standard Russian.

The Moscow linguists opted for the fourth definition. For practical reasons the recordings were made among the friends and families of the linguists themselves, i.e. among educated people. The speakers were city people (born in urban areas) with no traces of dialect: they had all finished high school (10 years), and many had completed their higher education (5-9 years). Thus a certain uniformity ('celostnaja, edinaja sistema') of speech was attained. All speakers knew standard, literary Russian.

So far no recordings have been made among workers or people in the service sector (shop assistants, drivers, waiters etc.), nor has anything been done among peasants and people working in the countryside (besides traditional dialect studies). In the 1920s there were several projects to study the speech of various social groups, but none of them were ever realized. A plan to study 'the speech of the workers' (Polivanov 1968:53) apparently stayed on that level. In Leningrad a group of students under the supervision of the linguist Boris Larin began recording the social dialects of the city in the middle of the 1920s, but their material has unfortunately not been preserved. Larin was also interested in slang, jargons and other 'uncodified' forms of language – a field not studied since (Larin 1977:213). All interest in the speech of different social groups, as well as the idea that changes in language depended on changes in the ruling social group, had become inconvenient by the end of the 1920s, when a monistic view of language became dominant. Some dialectologists had, however, noted that spoken language in some respects differed from the written forms of language. In a work published as early as 1915 Lev Ščerba pointed out that the primary form of spoken language was **dialogue**, and that this accounted for special structural features. His idea was developed in an article by Lev Jakubinskij (1923) who also emphasized the close relation between the speech situation and the forms of language used. These ideas were again brought into the foreground in the 1960s.

In 1973 the results of the Moscow linguists, directed by E.A. Zemskaja, were published in a monograph (*Russkaja razgovornaja reč'*) structured as a grammar of spoken Russian with sections on phonetics, morphology and syntax. A rudimentary chapter on gesture was also included. Although many forms of oral speech were identical with written speech, the linguists still thought it proper to speak of a different **system**, since the forms functioned in a different context with a different 'set of rules'. Much attention was thus given the **situation** in which the speech was uttered. Three criteria were considered necessary for impromptu speech:

1) the speaker is unprepared and speaks spontaneously;
2) the speaker is in immediate contact with the listener/s;
3) the atmosphere is relaxed (*neprinuždennyj*).

Zemskaja emphasizes the last criterion but gives no clear definition of it. She says the atmosphere is relaxed when the relations between the speaker and the listener are 'unofficial' (*neoficial'nye*). She further states that the concept of 'unofficial relations' is 'intuitively clear to everyone' (Zemskaja 1970:7).

Such a puzzling statement demands a short excursion into the ethnography of speaking in the Soviet Union, a field into which no linguists have thus far ventured. We must remember that all speeches in front of an audience – be it a small meeting in one's place of employment or a speech delivered from a tribune to hundreds of people – are considered **public** and as such subject to different kinds of control mechanisms. In the mass media, for instance, every appearance has to pass a board of censors and must therefore either be prepared in advance or approved of afterwards, i.e. before it reaches the audience. In Zemskaja's words: 'It is obvious that mass communication takes place only in literary language' (Zemskaja 1970:6). Most public statements are therefore written beforehand and the Russian one hears at public appearances (even if the speaker does not read his speech) has features of typical written language, often with stilted bureaucratic locutions (participles, verbal adverbs etc.). This situation has affected the speech behaviour of people in general. Many have developed something of a Pavlovian reflex: as soon as the situation approaches that of a public appearance it becomes 'official' in the mind of the speaker, who consequently begins structuring his speech according to the rules of formal, literary language. A third person entering a room in which two friends are talking might be enough to cause the situation to turn 'official'. The same is true if the speaker knows that his speech is being recorded, which makes tape-recording of impromptu speech difficult in many instances (Nikol'skij 1968:394). The rules governing this behaviour are apparently quite complex ('intuitively clear to everyone'!) and present an interesting field of study. One of the Saratov linguists gives an example of a 74-year old kolkhoznik who when speaking to an outsider on the state of a field strives to make his speech 'educated' (*kul'turnyj*) by inserting literary clichés into it (Sirotinina 1974:72-73):

> *Čistyj par. Da... Ego, značit, na god otložim. Vse èto* ***predvaritel'no*** *vspašem. Sejčas ego vspaxali, a potom èto* ***v izvestnyj period****, ponimaete li, tak skazat', projdet.*
> 'Bare fallow. Yes... I mean, we leave it for a year. We give it all a preliminary ploughing. It has just been ploughed and then for a certain period of time, you understand, time passes, so to say.'

Because the peasant tries to use 'educated' words with which he is unfamiliar, he is forced to put several fillers into his speech: *značit, ponimaete li, tak skazat'* (Sirotinina gives the example as an illustration of the use of fillers). Olga Lapteva, another researcher of impromptu speech, gives a similar example. A worker at a metro station gives an order to passengers stepping on the escalator (Lapteva 1976:317):

> *Graždane!* ***Pri vxode na*** *eskalator / kogda vy vxodite pobystree nado proxodit' ne zaderživajtes'!*
> 'Citizens! On entering the escalator / when you get on you must get on faster don't be so slow!'

Aware that he is speaking publicly, the speaker begins his sentence with the bureaucratic *pri vxode* found only in written instructions, but he cannot follow through in this style and repeats the same thing in normal words: *kogda vy vxodite.*

When the Russian linguists first listened to the tapes of their own impromptu speech many were shocked and refused to believe they spoke in such a 'disorderly way'. So strong was the impact of written language and standard grammar. What especially struck them was the great syntactic difference between written and oral speech. Two different opinions were voiced among the linguists:

- impromptu speech is characterized by a number of forms and constructions specific to oral utterances, or
- there are no specific constructions but impromptu speech is a totally different mode of organizing utterances.

A representative of the first opinion, Olga Lapteva, published in 1976 a work entitled *The Syntax of Spoken Russian (Russkij razgovornyj sintaksis)* in which she describes a number of syntactic constructions in colloquial Russian that differ from standard, literary Russian. She classifies the constructions into 6 different models with variants and thus enlarges the inventory of known syntactic forms in Russian. Her method of classification, however, is the same as for written language – little or no attention is paid to the play between syntax and intonation in the shaping of the utterances. Lapteva also admits that she takes into account only 'typified constructions' (*tipizirovannye konstrukcii*), i.e. constructions of high frequency in her material, and ignores everything that is 'loosely formed' (*slabo-oformlennoe*). In Lapteva's view most impromptu speech is chaotic and unorganized and therefore defies classification.

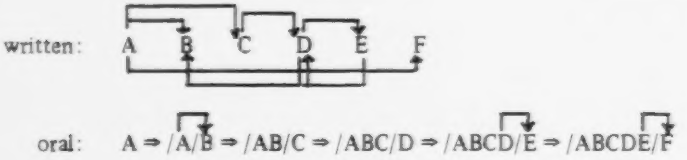
But let us take a look at one of Lapteva's 'loosely formed' utterances: *Ty tam ne blizko vannoj svet?* It consists of the semantic units 'you', 'near', 'bathroom', 'light'. The utterance is completely understandable in the **situation** in which it is said, despite its syntactic deficiences: the listener understands that the speaker wants light in the bathroom. To make this utterance acceptable in standard Russian we could say: *Esli ty blizko, zažgi svet v vannoj!* or *Esli ty blizko ot vannoj, zažgi tam svet!* The implicit verb is made explicit, the relations between the units are determined more clearly, but the utterance is made longer and more cumbersome. It appears that the syntax of literary Russian defines the relations between the units more precisely, while the syntactic vagueness of spoken utterances make them more flecible and economical.

One of the weaknesses of Lapteva's study is that the utterances are isolated from their context – indications of context are given only when the utterance would be completely incomprehensible without them. Lapteva is in fact studying oral speech **as if** it were written. This becomes clear when she classifies an elliptical utterance like *A gde avos'ka zdes' ležala?* into main and subordinate clauses (model D). *A gde avos'ka zdes' ležala* is considered to be a transformation of literary, standard *A gde avos'ka, kotoraja zdes' ležala?* One could just as well claim that it is an example of 'overlapping' (model E in Lapteva's system): *A gde avos'ka/avos'ka zdes' ležala?* The characteristic feature of spoken syntax is precisely the lack of clearly defined relations between the units. Thus a heavier load is put on semantics and context for the interpretation. If the researcher **defines** the relations – through the screen of written language – he distorts his object of study. Lapteva's study does not present any overall view of the syntactic structure of spoken Russian, but limits itself to a few constructions. The same is true of the monograph *Russkaja razgovornaja reč'*, published by the Russian Language Institute.

Boris Gasparov is a representative of the second opinion, which treats oral speech as a totally different mechanism from written speech. In an article (Gasparov 1978a) he considers impromptu speech in the larger context of oral versus written communication, which he even goes so far as to define as two different forms of culture. He criticizes the opinion which many linguists derive from their experience of classifying written language that oral utterances are chaotic and unorganized, and emphasizes the positive character of oral speech. He warns against using classificatory models developed for written speech on oral utterances.

> The specific structure of oral texts manifests itself in expressly 'oral' phrases, grammatical constructions, and so on, but it also manifests itself at a higher level – by specifically oral means of unfolding a speech sequence and expressing its message. The basic composition of the written text is a linear structure: the sequence of thematic units is controlled by a set of rules, and the composition of the whole text is determined by a rigid order of units, for each thematic unit has its own function which determines its position in the entire structure. Oral communication calls for a different structure, for a speaker cannot compose his speech according to a complicated set of rules. By its very nature, oral communication does not tolerate rigid linear structures. Moreover, a speaker enjoys means of expression which a writer does not have: melodic and rhythmical devices, gestures and facial expressions. The speaker continuously employs these means, and with their help creates a non-linear structure – a text which unfolds simultaneously along several channels, as it were. Therefore, the chief typological feature that distinguishes the oral from the written text is its non-linear character. (Gasparov 1978b: 15)

Since the flow of speech is irreversible (*neobratimest' reči*) the grammatical structure of oral utterances depends heavily on the functioning of our operative memory – connections between units are made only insofar as they can be kept in mind. Adjustments and corrections do not change this fundamental fact, they just add to what has already been said. During the speech act the speaker and the listener each make a prognosis of how the utterance is to unfold, but the plan is rough and approximate: theme, time sequence, mode. It is impossible to establish all syntactic and semantic connections between the units of oral speech. As soon as the utterance exceeds what can be kept in mind, the connections become looser; only relations between contiguous elements are clearly defined, whence the lack of grammatical coordination typical of impromptu speech. In written speech, connections can be made between distant units – the reader need merely go back and re-read the text. In oral speech every new element in the speech flow relates, as it were, to the sum total of what has been said before. The difference between oral and written speech could be schematized as follows (Gasparov 1978a: 75):



The syntactic structure of impromptu speech is more like a 'stringing' (*nanizyvanie*) of associations than a logical unfolding of the theme (an opinion also voiced by Sirotinina 1974: 122). Only some relations are fixed, and the elements form a conglomerate from which the meaning emerges through comparison and confrontation among the semantic units.

> The thematic unfolding of the text is not achieved by a direct logical sequence of units; rather, as the theme develops, certain units – or their parts – keep reappearing or recurring, and thus form thematic circles as it were. The units within the circles can be compared to parentheses or asides. The reappearance of a theme, its variations and repetitions, create a fragmented but fuller and more complex representation of the speaker's ideas. (Gasparov 1978b: 17)

While most Russian linguists limit their study of oral speech to the syntax of the sentence, or equivalent, Gasparov goes beyond it and outlines a structure of oral texts. Syntactic phenomena observed within isolated utterances are found to be repeated on higher levels, in the structure of big blocks of oral messages.

Syntactic features of Russian impromptu speech

1) Inversions and disrupted constructions.

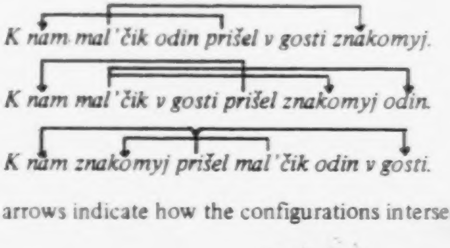
Gasparov characterizes the structure of impromptu speech with the agrarian term *čerespolosica* (approximately 'strip holding', as in the 19th-century peasant commune system): parts that belong together are thrown apart, elements of different constructions wedge into each other, stable word combinations are broken up. A sentence like *Knižku ja včera pročital interesnuju očen'* (standard. *Ja včera pročital očen' interesnuju knižku*), in which the expression *očen' interesnuju knižku* has been broken up and each part thrown to the margin of the sentence, is most natural in spoken Russian. If we take the sentence (Gasparov 1978a:76-77)

Odin znakomyj mal'čik prišel k nam v gosti.

the listener immediately interprets it as literary – a sentence learned by heart, the beginning of a story, etc. – and would never expect it in impromptu speech. To make it acceptable for spontaneous speech the following transformation can be made:

K nam v gosti prišel odin mal'čik znakomyj.

But even more radical changes can be made which not only do not make the sentence more difficult to grasp, but on the contrary make it more natural in oral speech:



K nam mal'čik odin prišel v gosti znakomyj.

K nam mal'čik v gosti prišel znakomyj odin.

K nam znakomyj prišel mal'čik odin v gosti.

(The arrows indicate how the configurations intersect.)

Since the word order in Russian is comparatively free, we find a great variety of syntactic configurations in impromptu speech. In the utterance *S krasnen'kim sobačku požalujsta bantikom dajte!* (standard: *Dajte požalujsta sobačku s krasnen'kim bantikom*) **all** the word groups (*s krasnen'kim + bantikom / dajte + sobačku / dajte + požalujsta*) have been broken up and thrown around (Russkaja razgovornaja rec' 1973:391).

In spoken Russian there is a general tendency to move important information towards the beginning of the sentence: *Interesnyj prinesli žurnal* versus standard *Prinesli interesnyj žurnal.* This gives impromptu speech a different sentence perspective from literary Russian. In literary Russian the word order is used for the logical organization of the text according to the principle: from given to new information. In impromptu speech we find the opposite: the new is often stated first, while the given is added at the end or even left out: *Vse* ***doklady*** *pišut* versus standard *Vse pišut* ***doklady*** (Sirotinina 1974: 123). Lapteva even questions whether it is possible to classify the information in all spoken utterances into 'given' and 'new'. She prefers to talk about 'information centres' (*informativnye centry*), information clusters, some of which bear more weight than others (Lapteva 1976:1976:187-189, 243-257). The 'loaded' words are always in strong positions intonationally:

Tjaželye *u nas* ***vešči*** *vse-taki.*

Èto očen' ***zamančivaja*** *dlja menja byla* ***mysl'****.* (Lapteva 1976:188)

2) *Breaks, pauses, fillers.*

In impromptu speech we find a number of words without meaning whose function is to fill the pauses when the speaker looks for words or prepares what he is going to say next (*vot, nu, značit, voobšče, v obščem, sobstvenno govorja, tak skazat', konečno, èto samoe*): ***Vot nu*** *prosto ona* ***tak vot ne*** *mogla navernoe udelit' mne vnimanie.* (Russkaja razgovornaja rec' 1970:116). These words have been studied, mostly quantitatively, but, as Gasparov claims, their positive role has not been recognized. Many linguists take an outright negative view of them, regarding them as 'parasitic'. It seems probable that their function is not only to 'fill up' but also to cancel semantic and grammatical obligations and thus make it easier for the speaker to begin anew at any point in the speech flow: *Pošli my raz,* ***nu znaeš'*** *na uglu,* ***tam vot*** *ešče gastronom rjadom,* ***vot značit*** *kiosk takoj* (Gasparov 1978a: 78). Fillers appear even when the speaker has prepared his speech. In this case they give the listener a possibility to pause and let the information sink in. From the listener's point of view they can thus be compared to repetitions and variations.

3) Activation of common cases.

In spoken Russian a word is often emphasized by being 'picked out' and moved to the beginning of the utterance. In such a position it is not declined but appears in the nominative (infinitive if a verb). This construction is standard in all kinds of everyday questions – the important part of the question/request is 'thrown out' first:

> ***Kniga ėta*** *– gde pokupali?* vs standard *Gde pokupali* ***ėtu knigu****?*
> ***Ulica*** *Gogolja – kak projti?* vs standard *Kak projti na* ***ulicu*** *Gogolja?*
> ***Biblioteka*** *Lenina – sojdete?* vs standard *Vy sojdete u biblioteki Lenina?*
> ***Kolbasa*** *za dva-dvadcat' – mne trista gramm, požalujsta!* vs standard *Požalujsta, dajte mne trista gramm kolbasy za dva-dvadcat'!*

Sometimes the emphasized word is repeated by a declined pronoun:

> *A* ***gus'****, vy budete sup varit'* ***iz nego****?*

If the emphasized word is a verb, the pronoun *ėto* referring to the action generally appears in the second part of the utterance:

> ***Pis'mo napisat' – ėto*** *ja zavtra.*
> ***Obeščat' – ėto*** *on umeet.*

Such constructions increase the syntactic fragmentation of spoken utterances. Bits of information are **stringed** to each other without the grammatical coordination characteristic of literary speech.

All the above-mentioned operations (inversions, disrupted constructions, fillers, undeclined words) make for a freer syntax, a stringing of independent units, that corresponds to the mobility in the speaker's train of thought. The syntax of impromptu speech brings together lexical items in ways unknown to literary syntax and includes the possibility of alternative relationships (Gasparov 1978a: 79):

> *Pirožki svežie / tol'ko čto kupila / na uglu magazin / svežie takie.*
> 'Fresh pastries / I bought (them) just now / there is $\left.\begin{matrix}\text{a}\\\text{the}\end{matrix}\right\}$ shop on the corner / real fresh ones.'

If we change this string of fragments into a literary phrase, we can have:

1) *Kakie svežie pirožki ja kupila tol'ko čto v magazine na uglu!*
2) *Ėti pirožki takie svežie – ved' ja ix tol'ko čto kupila v magazine na uglu.*
3) *Ėti pirožki takie svežie – ved' ja ix tol'ko čto, na uglu, kupila v magazine.*

However, none of these variants render the exact meaning of the spoken utterance. In (1) the indication of time (*tol'ko čto*) and place (*v magazine na uglu*) are not directly related to the freshness of the pastries. in (2) and (3) the modifiers (*tol'ko čto, v magazine na uglu*) explain why the pastries are fresh but lose the demonstrative role they have in the impromptu utterance.

Researchers of Russian impromptu speech agree that the meaning in spoken utterances is created more by the juxtaposition (confrontation and comparison) of semantic units than by grammatical relations between the units (Gasparov 1978a:91; Russkaja razgovornaja rec' 1973:402). An impromptu utterance put on paper often appears vague. The reader has to make an effort to interpret it – an effort that consists in recreating the situation it was uttered in and giving the words the right intonation. Unfortunately most Russian impromptu speech available to foreigners is in written form. In 1978 an interesting collection of texts was published by the Russian Language Institute in Moscow. However, one must be thankful that studies of this form of speech have begun and are continuing, even if the number of linguists working in the field is small. One can only hope that this work might be followed by studies of linguistic behaviour (*rečevoe povedenie*) and the ethnography of speaking, not to mention slang and social dialects.

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REPORTS ON SWEDISH PROJECTS RELEVANT TO THE STUDY OF IMPROMPTU SPEECH

I. Talsyntax

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The project *Talsyntax* (Syntax of Spoken Swedish) was started in 1966 at the University of Lund as a branch of a large-scale research program called *Svenska språket i nutidens samhälle* (Swedish in today's society). The program comprised several Swedish universities. The different projects within the program had a common goal in describing the use of modern Swedish on the basis of large materials of data. The issue was to investigate how people really write and speak, and present the results as much as possible in a statistical format. This goal and methodology demanded a research organization on a broad basis, and with a long-range perspective. Grants from organizations like *Riksbankens jubileumsfond* – which took care of the financial aspects of *Talsyntax* in their entirety – were to provide the means for fulfilling the ambitious goal.

The project was set up at a time when the grammar of Standard Swedish and of the Swedish dialects had long been considered respectable fields of research. However, there had been few if any attempts to describe spontaneous speech and its ranges of individual, social and situational variation. As regards syntax, it was also desirable to enrich our knowledge of the relation between the norm, as manifested in the school-grammars for instance, and the everyday use of language. A number of similar problems that had not previously been dealt with constituted the point of departure for our work.

In the following I will try to summarize the results. The three main aspects that will be dealt with are: (1) data collecting, (2) methodological results and (3) empirical results.

1. Data Collecting

One of the main results of the work is the establishment of an archive of representative samples of spoken Swedish. The samples are based on the standard language, but special attention has been paid to social, regional and situational variation. Basically, the material consists of tape recordings, most of which (about one million words) have been transcribed. Moreover, about 75% of the material has undergone a very narrow transcription, copies of which are available to researchers. More important, however, is the fact that the greater part of the material has been grammatically analyzed. The result of this analysis, together with the texts themselves, is available on magnetic tape for computer processing. These magnetic tapes contain detailed information on the occurrence and frequency of different syntactic phenomena in different types of texts, also with respect to different types of speakers. It is furthermore possible to extract large numbers of examples for more detailed investigation, these examples being available through a mechanical print-out system. So far about 125.000 words from the material have been transferred onto magnetic tape. A corpus of written Swedish of some 235.000 words is also available on magnetic tape, as during part of its existence the *Talsyntax* project has been coordinated with the project *Skrivsyntax* (Syntax of Written Swedish). The latter has been financed by the Swedish School Board, *Skolöverstyrelsen*, and its main goal has been to analyze and evaluate the written language of high-school students on the basis of professionally written prose. Together the spoken and written material constitutes a corpus that is unique in the world: what we have collected on magnetic tape is not only a large amount of texts, but also detailed grammatical analyses of each sentence in the different texts. It is desirable that this corpus should be maintained as a living archive, which can give researchers rich and easily available data. For this purpose the Department of Nordic Languages at the University of Lund has formed a follow-up project called *Talbanken* (The Speech Bank).

2. Methodological Results

The ultimate goal of the research was to make the linguistic description as complete as possible. The aim was not to investigate specific details in the use of Swedish, such as the use of the genitive form or the passive construction. The aim was rather to arrive at a description that went from the higher-level syntactic units, the macrosyntagms, down to the specific parts of speech and their components. The description was also to take into account different prosodic phenomena (stress and intonation) and aspects of speech production itself (including false starts and repetitions, which are so characteristic of spontaneous speech). There were no direct methodological models to go by, since research into spoken language still was a relatively undeveloped area of research, even in an international perspective. The basic pattern was therefore set by devising a couple of manuals: *Manual för analys och beskrivning av makrosyntagmer* by Bengt Loman and Nils Jörgensen (Lund 1971), and *Manual för grammatisk beskrivning av talad och skriven svenska* by Ulf Teleman (Lund 1974). A shorter article was written by Bengt Loman concerning the prosodic analysis of the material, *Brott, paus, planering* (in *Skrifter utgivna av Nämnden för svensk språkvård* 48). The methods were devised so as to facilitate computer processing of large amounts of data. The manuals were naturally also used in composing the information for the magnetic tapes. The former manual contains rules for segmenting the speech stream into different kinds of syntactic units, macrosyntagms, including complete, incomplete and fragmentary sentences. This process of segmentation was the practical basis for the more detailed analysis to be undertaken. The detailed analysis that follows concentrates on the internal syntactic structures within these segments. However, during our work on the problem of the macrosyntagms we found that a detailed analysis of the macrosyntagms themselves proved extremely interesting. For instance, we were able to get information on the extent to which people speak – spontaneously – in complete, well-formed sentences, or in sentence fragments. And we could get data on the amounts of unintentional repetitions, false starts and incomplete units that occur in everyday speech. Also, the extent to which different social groups and speech in different situations varied in this respect proved to be an interesting area of research.

The prosodic analysis provides opportunities for in-depth descriptions of the role of pauses in spontaneous speech. To what extent do we use pauses within a sentence between clauses and between parts of speech? Where do we most typically pause? What can we learn about the process of speech planning from the position and frequency of pauses?

The aspects of language that are described according to Loman's and Jörgensen's manuals are basically not concerned with the grammar of Swedish as such. Strictly speaking, they fall outside the domain of syntax proper, and are concerned with the structure and function of speech production itself. They are concerned with the manner in which people manage to fulfil their linguistic intentions in spontaneous speech.

Teleman's manual, on the other hand, focuses directly on analyzing speech into grammatical categories. On the surface the method of analysis is reminiscent of traditional sentence parsing. The manual is not based on any particular grammatical theory, but with some additions to the computer programming it could relatively easily be adapted to the principles of generative grammar. Every word in every clause is analyzed with respect to its lexical characteristics and its syntactic function. All such data are kept on special records, which are then punched for computer processing and fed onto the magnetic tapes. From the information on the magnetic tape it is then possible to extract many different kinds of grammatical information, for instance, the functions of the attributive genitive, the different types of combinations of parts of speech within a clause, the use of the passive constructions, and the position of different kinds of adverbials in a clause.

An important aspect of our work has been to develop methods for data collecting and for classifying the material according to non-linguistic categories. Research into spoken language has to battle with an unfortunate paradox: the aim is to investigate how people speak spontaneously; this they do at their best when they feel that they are not being observed; on the other hand, there is no way to observe people's behaviour without observing it. Nevertheless, the general opinion among researchers is that the best source of material for investigations into spontaneous spoken language is the interview (on a familiar and interesting topic). Most of the material in *Talsyntax* therefore consists of interviews. The interviews were devised to look like sociological polls, and even used as such. This made our linguistic goal less perspicuous to the people interviewed. All in all some 200 speakers of Swedish were interviewed in the towns of Borås, Trelleborg and Helsinki and in the district of Tornedalen. The choice of informants was made by chance, though we did take into account their socio-economic status, and tried to get an even representation of subjects representing different categories; in particular, we made use of a rough classification into professionals, businessmen, clerks/ salesmen, and workers. The continuing research that has been done with our corpus has in fact focused on linguistic differences that might be socially governed. Also, we have attempted to make an even more delicate classification of the interviewed people, and a specially formatted social index has been made up for each person.

Another type of variation in spoken language is caused by the difference between more formal and more informal speech. In planning the recording sessions we could naturally make use of the generally accepted fact that people talk more formally the more conscious they are of somebody observing them, and the more they themselves are conscious of the importance of the linguistic form. A taping session was arranged where groups consisting mainly of professionals were gathered to partake in a debate on a departmental problem. The debate (with a chairman) was preceded by a warming-up session, where the participants were able to talk through the issues in the way of preparation. However, this part of the session was also taped, without the participants' knowledge.

As a whole the material contains examples of spoken Swedish in some typical speech situations: interviews, conversations, and debates. In addition to this the material also includes a number of tape recordings of authentic committee meetings both on a national and a more local level of administration. Here, too, the styles of the speakers were found to vary according to the roles they played at different points in the meetings: giving a speech, partaking in the general discussion, acting as chairmen, etc.

At a later stage we were able to broaden our investigations of the stylistic and functional variations of spoken language, in that texts and data from an investigation into the language of TV and radio were made available to us. This investigation has been started as a special project at the Department of Nordic languages of the University of Lund.

3. Empirical Results

The empirical results of the project have thus far been published mainly in a special series (Series C) within *Lundastudier i nordisk språkvetenskap* (Studentlitteratur, Lund). In particular, four Ph.D. theses should be mentioned:

Mirja Saari, *Talsvenska* (Helsinki 1975);

Nils Jörgensen, *Meningsbyggnaden i talad svenska* (Lund 1976) and *Underordnade satser och fraser i talad svenska* (Lund 1978);

Jan Einarsson, *Talad och skriven svenska* (Lund 1978); and

Godelieve Laureys, *De adverbiale bepaling in het Zweeds* (Gent 1979).

Results from work within the project have also been published in two volumes with the title *Språk och samhälle* (Gleerups, Lund 1972, 1974). A third volume with the subtitle *Social variation i talspråkets syntax* was published in 1976 and may be regarded as a final report from the project. Furthermore, the anthology *Barnspråk i klassamhälle* (Liber Läromedel, Lund 1974), edited by Bengt Loman, deals with questions of linguistic handicap and class-dirrerences in connection with the theories of the British sociolinguist Basil Bernstein. An attempt to apply the findings of the project in education is sketched in Loman's article *Miljö och språkförmåga* (in *Svensklärarföreningens årsskrift* 1973).

A theoretical starting-point for our work has been Bernstein's argument that there exist two codes which govern the use of language in the British middle class and working class, in the direction of an elaborate code, and a restricted code, respectively. Bernstein's theories have been of major importance in many countries, especielly in their pedagogical applications. The work within *Talsyntax* has partly been directed toward an investigation of the extent to which it is possible also in modern Sweden to find similar sociolinguistic oppositions, in syntax in particular. This we considered an urgent task, since the international debate around Bernstein's theories has suffered from a certain lopsidedness. The theoretical research has been far ahead of empirical verification, and has even at times been confused with empirically proven facts. The empirical investigations have been very few, and often restricted as to planning and purpose; for instance, there has been a lack of data on adult syntax.

It is a task both difficult and ungrateful to summarize the results of *Talsyntax* on this issue within the limited space I have at my disposal here. Particular data can be analyzed and interpreted in different ways. Still, the material does give an impression that the spoken language is surprisingly homogeneous in the areas we investigated. Not only is it true that different informants use basically the same stock of grammatical constructions; even the frequency figures for different phenomena are similar from one speaker to the next. A bird's-eye view of the material makes one want to talk about "a common grammar". Another general observation is that spoken language is much more rule-governed and grammatical than what one perhaps tends to think intuitively. There is a constant effort on the part of the speaker to express himself in complete and well-formed sequences. Mirja Saari's investigations have shown that about 70% of all the sentences in spontaneous speech are "correctly constructed"; even sentences that are "wrongly constructed" can decrease considerably in number if they are filtered through a set of editing rules, which allow you to overlook sequences that the speaker himself marks as having been wrongly constructed, for example by changes in his pitch range and speech tempo.

There are also many detailed differences between speakers of different groups. However, one has to be careful in making judgments about these data, especially in relation to linguistic class differences. The material is, after all, relatively limited, and the analyses were mainly focused on strictly linguistic issues. Further, the analysis has only been concerned with isolated sentences and their internal form. Neither the content or sense of the text, nor the function or communicative effect of the utterances has been considered. The way we conducted the tape-recordings has not allowed us to consider those extra-linguistic variables that always accompany speech: gestures, mimics, speech tempo, voice intensity for instance. Also, only to a very limited extent has it been possible to distinguish between ready-made, formulaic phrases, and on-the-spot-created sequences in spontaneous speech. Above all, there are no workable models for detailed analyses of the relation between language and the socio-economic structure of society.

Therefore the *Talsyntax* project should be seen primarily as a study of the general characteristics and peculiarities of spoken Swedish. As such our work will be of practical significance for the teaching of Swedish as a foreign language, and for perceptual judgments of different varieties of written and read-aloud Swedish.

II. FUMS

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One of the largest collections of spontaneous present-day spoken Swedish is kept at the Unit for Advanced Studies in Modern Swedish (Avdelningen för forskning och utbildning i modern svenska – FUMS) at Uppsala University. Since the mid-1960s a large number of sociolinguistic research projects have been carried on at the Unit, most of them focusing on various types of impromptu speech.[1] The four projects which have generated most empirical data, and on which this survey will concentrate, are
1. The Urban Dialect of Eskilstuna, 2. The Child's Linguistic Identification, 3. Language, Roles and Social Relations, 4. Town and Hinterland: Urbanisation and Language.

The order of magnitude of these studies is indicated by the following figures:

1. 83 informants, 53 hours of recording
2. 85 informants, 78 hours of recording
3. 56 informants, 32 hours of recording
4. 120 informants, 53 hours of recording

The 78 hours recorded for project 2 include data which cannot be classed as impromptu speech (reading aloud and a formalised communication game), and projects 2, 3 and 4 also include other types of data (test results and answers to questionnaires).

The term 'impromptu' can probably be taken to refer primarily to certain properties of the discourse structure of speech such as turn-taking, corrections, the use of pauses, and cooperative devices. The four projects have not, however, been primarily concerned with linguistic research into phenomena

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[1] These projects have chiefly been financed by the Swedish Council for Research in the Humanities and Social Sciences and the Bank of Sweden Tercentenary Foundation.

of this kind, even if most of the data in fact lend themselves very well to such investigation. Our attention has chiefly been focused on smaller segmental units, in particular phonological and morphological units. The overriding purpose of the projects is to describe, and bring to light the underlying causes of, sociolinguistic variation at these levels. Varying in design and involving different situations and groups of informants as they do, the projects are intended to complement one another and provide a well-rounded picture of patterns of linguistic variation.

The data collected for project 1, The Urban Dialect of Eskilstuna, consist of informal interviews – or, to use a more appropriate French term, *conversations dirigées* – between the investigator and one informant at a time. The informants represent the entire social spectrum, and they were 15 years of age or older when the recordings were made (1967-68). Only native residents of Eskilstuna were included. Eskilstuna is a medium-sized industrial town in Central Sweden, 120 km west of Stockholm.

Project 2, The Child's Linguistic Identification, also gathers its material from Eskilstuna and is to a certain extent based on the results of the earlier investigation there. The informants, however, are school children aged from 7 to 16, recorded over three successive years, thus covering the first to the ninth year of the elementary comprehensive school. The aim of the project is to investigate to what extent the linguistic behaviour of the child can be taken as symptomatic of its gradually growing social identification during (pre-adolescence and) adolescence. It is also suggested that an increasing awareness of the sociolinguistic rules regarding situationally appropriate variants is manifested in continuously growing stylistic variability over the years. That part of the empirical data which consists of recorded speech was collected in four situations with varying degrees of formality: reading aloud (individually), a formalised communication game (in dyads), a card game and a free discussion (in groups of four). The same situations were repeated during each of the recording years from 1977 to 1979.

The third project, Language, Roles and Social Relations, centres on Burträsk, a small community in the north of Sweden, where data were collected in 1973-74. In many respects this project is a contrast and a complement to the Eskilstuna project. Situational variation is here of major concern, while the Eskilstuna recordings are situationally uniform; in Eskilstuna the socio-economic spectrum is rather wide, while Burträsk is a much more egalitarian community; Eskilstuna speech lies relatively close to standard Swedish, which has developed from the central dialects, while dialectal speech in Burträsk finds itself at a considerable linguistic distance from the standard; variation in Eskilstuna can best be thought of as gradual and continuous,while one could expect to find a more radical code-switch in Burträsk with a lot of variables involved in simultaneous variation. And finally, in Burträsk the data are drawn, not from individual informal interviews, but from recorded sessions with open and closed groups, where each recording comprises two phases, one when the group talks on its own and another in the presence of an outsider introduced as a social scientist. Some of the speakers were also interviewed formally.

While projects 1 and 3 – an virtually 2 also – operate exclusively with natives of the communities concerned, project no 4, Town and Hinterland: Urbanisation and Language, has focused on the majority of adult town dwellers, viz. the migrants. To what extent do migrants change their language after moving, and if they do, do they change in the direction of the local dialect of their new place of residence or in the direction of the standard language? What is the relationship between the migrants' linguistic modification and their social adjustment? Do long- and short-distance migrants modify their speech along the same lines? These are some of the questions we want the project to answer.

The areas selected for investigation are the cities of Eskilstuna and Skellefteå, as immigration centres, and rural areas of northern Västerbotten and north-west Södermanland, as emigration areas. Three different migrant groups are being studied, namely short-distance migrants from rural Västerbotten to Skellefteå, short-distance migrants from rural Södermanland to Eskilstuna, and long-distance migrants from rural Västerbotten to Eskilstuna. In addition there are four control groups consisting of people born and still living in the four regions under study.

The corpus of the project consists of telephone interviews which were carried out in the winter of 1978-79. Quite apart from its economic advantages,this procedure also successfully induced the informants to talk freely in reply to the standardised questions.

On the structural level we have chosen to study, the impromptu character of the material is brought out mainly by the extensive variation in linguistic expression. This variation is not only inter-individual but also intra-individual. There are very few informants with a categorical use of one variant even within the same speech situation and in identical linguistic contexts. This seems to suggest that the variation, at least in Central Sweden, is quantitative in character and continuous over speaker groups. In the Burträsk material a slightly different pattern emerges.

In the urban language of Eskilstuna, variation according to social class assumes the expected pattern with the higher social strata conforming more closely to the standard norm. Age variation exhibits an interesting detail which has also emerged in other Swedish sociolinguistic surveys. By and large it is the second youngest age group, people approximately 25-40 years old, who adhere most closely to the prestige norm. Probably this has to do with changing identification from the smaller local group to a larger nation-wide community, and this is also the age of social ambition and aspirations of a higher social position. Now this pattern is not uncommon for stable sociolinguistic variables, but here it can also be discerned in variables undergoing change.

As for sex differentiation it is true that on the whole women are more favourably disposed to prestigious forms, but this is the result of two opposing tendencies. It is women in the upper and middle social classes and younger women who represent this well-documented trend, but older women and women in the lower social classes favour the local non-standard forms more than do men in comparable subgroups. The explanation of this reversal, I think, is to be found in the changing social role of women today.

In terms of linguistic change, both of the two well-known patterns *change from above* and *change from below* are borne out. And it is worth noticing that it is the morphological variables (e.g. past participle ("supinum") of verbs of the 2nd conj *t* ~ *i*) that follow the pattern of change from above, where the difference in speech forms is equivalent to a dissimilarity between the traditional form of the regional spoken language and the orthography of the written language. By way of contrast we can witness change from below in some phonological variables (e.g. (ö:) and (ʉ:)) where the changing pronunciation does not come into conflict with the spelling but where the change involves a partial restructuring of the vowel system.

The diachronic changes suggested by the Eskilstuna study all take place in apparent time. The fact that some of the same variables are being investigated in the project The Child's Linguistic Identification makes it possible to ascertain whether these changes are also taking place in real time. A comparison has been made of the behaviour of one such variable, the realisation of the singular definite form of neuter nouns (*t* ~ ø). It turns out that both trends observed in the first investigation are confirmed by the second: a long-term, continuous development towards the *t* form of the standard language, along with a marked contrast in every generation between the clearly more local norm of school children and young people and the more standard norm of adults. This variable also indicates that children are sensitive to situational requirements from an early age. Stylistic variation between the freer and more controlled situations is marked, in junior classes just as much as in the senior years of the school. The phonological variables (l), (ö:) and (ä:) behave in closer agreement with the hypothesis that stylistic differentiation increases with the increasing age of informants. In the informal situations these variables show a higher incidence of local dialect variants among pupils in the higher years of the school, whereas in the more formal contexts they move closer to the standard language or else remain unchanged throughout children's school careers.

In the rural community of Burträsk in northern Sweden, variation assumes a somewhat different pattern. Despite relatively wide intra-situational variation in individual speakers, it is possible, by introducing a measurement of co-occurrence, to unearth what can be termed a relative code-switch. The twelve linguistic variables studied, each with a dialect variant (D) and a standard variant (S), can be divided into a set of dialect indicators (DI) and a set of standard indicators (SI). When changing from an informal to a more formal situation most speakers alternate, on the whole, according to one of the following patterns.

Speaker group 1		Speaker group 2	
Situation A	Situation B	Situation A	Situation B
DI : D ------->	DI : S	DI : S ------->	DI : S
SI : D ------->	SI : D	SI : D ------->	SI : S

This results in three different varieties made up as follows:

1 = DI : D + SI : D
2 = DI : S + SI : D
3 = DI : S + SI : S

These varieties may be termed dialect, regional standard and standard respectively. Depending on social factors like age, education and place of of birth (centre or periphery), nearly all Burträskers respond to a shift in situation either by adhering to the same speech variety throughout both situations or by alternating between 1 and 2 or between 2 and 3, but almost never between varieties 1 and 3.

At the present stage of work on Urbanisation and Language, no definite conclusions can be drawn concerning the project's prime objective, viz. to correlate the changes arising in migrants' language with their social adjustment to their new place of residence. Certain trends in the linguistic behaviour of migrants can, however, be discerned by examining individual variables. These variables are chosen and delimited in such a way that for every instance of a variable it must be possible to tell whether the informant has changed his language on this point or not and, if he has, whether in the direction of the new local norm or the standard language. It would appear, firstly, that long- and short-distance migrants behave differently and, secondly, that whether they change and if so in what direction depends on which variable is being considered. Short-distance migrants adapt to a large extent to the urban language, even where it diverges from the standard (e.g. the pronunciation of *ö:* in Eskilstuna). The guiding principle of long-distance migrants, on the other hand, appears to be to avoid conspicuous dialect features whether they belong to the dialect of their original or their new place of residence. Thus people moving from Västerbotten to Eskilstuna abandon almost entirely the *ø*-ending form of the present tense of strong and 2nd conjugation weak verbs (e.g. *köp*) in favour of the longer forms of Eskilstuna speech and standard Swedish (e.g. *köper*). They do not, however, adopt the Eskilstuna past participle forms of 2nd conjugation verbs ending in *i* (*köpi*), but retain the forms existing in their original dialect and standard Swedish (*köpt*). In the case of another variable they show, as a group, a higher frequency of standard forms than natives of either Västerbotten or Södermanland still resident there (preterite of 1st conjugation verbs *-ade* as against *-a*). As regards lexical provincialisms, basically the same trend can be made out, i.e. long-distance migrants lose more of their original language than they assimilate from the language of their new environment.

The investigations described here bear witness to considerable inter- and intraindividual variation at the structural levels examined. Many other studies provide support for the claim that this kind of variation is greater in informal than in formal situations. It is, therefore, of no little importance from what type of discourse the empirical data to be studied are drawn. This is then, in sum, the relevance of the projects presented to the study of impromptu speech.

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III. Språkdata

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The project "Språksociala studier i en talspråklig databas"[1] aims at describing spoken language from a semantic-communicative point of view. The purpose of the project is (1) to investigate the possibility of grouping informants on the basis of the result of a linguistic (semantic-communicative) analysis of recorded spoken language, and (2) to establish possible interrelations between these groups and social data. Theoretical considerations and practical work have led to the conclusion that, for the purpose of the project, free conversation is the optimal speech situation. A random selection of informants have been asked to choose a partner for free conversation, to be recorded by the informants themselves without the assistance of project personnel. A corpus of about 100 recordings, comprising some 500,000 running words, has been gathered.

Detailed linguistic criteria distinguishing about ten semantic-communicative categories have been formulated. The linguistic analysis largely concerns the question how a given message is communicated. Among the categories thus studied, which are both illocutionary and propositional in nature, emphasis has, in particular, been laid on modality and causal relations as well as attitudes toward the receiver and the form of the message.

From a theoretical point of view, a speech situation where both participants can be said to play their habitual roles in an appropriate setting, talking about well-known subjects of their own choice, yields the best conditions for gathering a corpus of casual speech. That is to say that as few factors as possible should make the speakers inclined to reflect on their language (and possibly use a planned or high status language), and as many factors as possible should favour fluent, natural speech.

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[1] I.e. "Sociolinguistic Studies in a Data Base of Spoken Swedish". The project is financed by grants from SÖ (the National Board of Education) and HSFR (the Swedish Humanistic and Social Science Research Council) and is carried out at the Department of Computational Linguistics (Språkdata), University of Göteborg. Leader of the project is Sture Allén.

The methodological consequences of the aim to achieve natural role relations for the recordings were primarily to let the participants do their recordings of free conversations themselves, without the assistance of any project personnel. We also preferred the recordings to take place at home or at work, i.e. at a well-known place with a partner of their own choice. It turned out that the majority of the informants had access to a cassette recorder. (The others used one of the project recorders.) This also means that they were used to the technical devices needed. These are circumstances which favour our endeavour. The conversations turn out, actually, in many cases, to be highly improvised. The speakers, knowing each other well, permit themselves to associate freely and change the subject accordingly. Some of the recordings are poor from a technical point of view (that is the risk one has to accept for not involving technical personnel) or characterized by the nervousness of the speakers. Most of the recordings, however, are astonishingly natural.

From the point of view of the theme Impromptu Speech the corpus thus provides a relevant body of material. The project, focusing on a semantic-communicative analysis, does not directly study the impromptu aspect of the conversations, but taking the content as a starting point for the analysis one has to deal with different forms of expression. In the conversations some of these, of course, are characterized by the conditions of casual speech. A few examples of observations of these phenomena in the corpus will be given below.

What, then, constitutes impromptu speech in these conversations? (Without giving a definition of impromptu speech we here focus on such cases of improvisation that the speech situation in some way has brought about.) To answer the question we need to take into consideration the conditions of a conversation. The physical environment being common to the two participants, a lot of information need not be conveyed explicitly. The speech situation involves interaction which requires collaboration between the interlocutors. They thus have to make sure their partner follows, and, on the other hand, adapt themselves to the answers and reactions they get. Another aspect of the cooperation is that both speakers have to defend their own position and make sure they can present their opinion. One has to plan this while the interlocutor is talking and maybe make one's statement in close connection with his speech. Neither of them knows how the dialogue will end. The aim of the conversation is normally not fixed, but there is room for free associations.

Another important condition of spoken language is that the different pieces of information have to be presented in a temporal sequence. The speaker's execution of his talk often tends to begin with a general picture. The important information, modifications and appeals do not appear until the end of the utterance.

From the point of view of the single speaker the spatio-temporal situation that the conversation constitutes also includes the speech of the interlocutor. This means he will get into situations where he has to complete someone else's utterance, which involves a component of improvisation. Linguistically this means that the line of one speaker does not necessarily include all the component parts of a sentence that would correspond to the complete sentence. Some of them are left out (the context is clear enough), it would be inappropriate to be redundant, others are said by the interlocutor. In a written language perspective this would be characterized as ellipsis. This can be final or intitial depending on the context.

In the dialogue one constantly has to check whether one's interlocutor follows. Short lines with appeals like *don't you think, isn't it, I guess* give you the opportunity to stop and explain, if you don't get positive feedback. In your capacity as the listener you can make sure you correctly understood what the speaker said by adding a phrase or a clause in the form of a question to his sentence:

A: men jag har sett det förr
(but I have seen it before)

B: när du har varit utomlands eller
(when you have been abroad, you mean
(literally: 'or')).

The cooperation does not give you any time for preparation, you must answer directly or adjust your line to what has just been said. On a linguistic level this is to say that you work out your line with an expression or construction of your interlocutor as the syntactic starting-point.

In free conversations the interlocutors easily change the subject by way of association. In order to express his idea, the speaker must signal the change of subject by indicating what area he is interested in. The spontaneous change, maybe caused by an idea several steps back in the conversation, is not necessarily indicated by linguistic means. But he can refer to a word or idea in the preceding speech, or he can give a general indication like *by the way*... These conditions characterize a lot of spoken language: there is little time for preparation, the general idea is to be presented first, and the restrictions on short time memory (in the speaker and the listener) do not permit an immediate indication of the logical structure. The ideas have to be presented in the order they appear. As has often been pointed out, spoken language tends to give important information at the end of an utterance, because many circumstances that the speaker does not control influence his planning of the speech.

The analysis of content categories in the project shows how the use of one category can support the interpretation of another, in other words a kind of redundancy. In the impromptu speech perspective there is another typically interactive phenomenon in the use of content categories. The interlocutors rather often cooperate in constructing (expressing) a token of a content category. This cooperation between the speakers constitutes a difficulty in the semantic analysis of spoken language. On the other hand, it is a major feature in the characterization of conversation and impromptu speech.

In the conversation, the line of thought of the speaker such as it is interpreted by his interlocutor is sometimes completed by the latter. The cause indicated by one spekaer is followed by an expression of the effect from the other speaker.

B:	*Jag ska bada först* *(I am going to have a bath before)*	(interpreted CAUSE)
A:	*ja då kommer du vid femtiden då* *(well, then you'll come by five o'clock)*	*EFFECT*

The listener interprets a cause in the line of the speaker and indicates the effect. The two instances are not completely comparable and therefore kept apart. In the following example D interprets A's explicit effect (1) as containing also a cause (2) for which she states the effect (2):

A:	*kan man böja dom* *(can one bend them)*	
B:	*nej det ska du inte helst inte göra* *(no you've better not do that)*	(interpreted CAUSE 1)
A:	*nej då lägger jag dom här så länge* *(well, then I'll put them here for a while)*	EFFECT 1 (interpreted CAUSE 2)
D:	*då tappar du dom sen* *(but then you'll loose them)*	EFFECT 2
A:	*nej bara så länge* *(no, only for a while)*	

Modality shows a similar pattern. The listener sometimes makes a major contribution to the proposition the modality of which is expressed by the speaker.

B: *så det är riktigt men ändå så så blir det att vi får*
(so that is correct but it still turns out that we shall have to)

A: *ja klä skott ja*
(yes, suffer from this)

The informants present different patterns both in their interaction and in the frequency of the different categories. One aim of the project is to find out whether the informants can be grouped according to their use of these categories.

The transcription of the corpus of conversations has been made available in machine-readable form by means of encoding. The linguistic analysis is carried out interactively at display terminals and the results are stored in such a way that access is possible both via the content categories and the linguistic expression. This flexibility makes it possible to compute the results in various ways. There is also a possibility of relating interactionally connected entities which are of relevance for the analysis of impromptu speech.

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